

# AUSTRALIAN SOCIAL TRENDS 1 9 9 4













# AUSTRALIAN SOCIAL TRENDS 1994

IAN CASTLES
Australian Statistician

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The Australian Bureau of Statistics has catalogued this publication as follows:

Australian social trends / Australian Bureau of Statistics. — 1994- . — Canberra : Australian Bureau of Statistics, 1994- . - v. : ill.; 30 cm.

Annual

Catalogue no. 4102.0

ISSN: 1321-1781

- 1. Social indicators Australia Statistics Periodicals.
- 2. Australia Social conditions Statistics Periodicals.
- I. Australian Bureau of Statistics.

319.4

# **Preface**

AUSTRALIAN SOCIAL TRENDS 1994 is the first of an annual series which aims to monitor changes in Australian social conditions over time. An examination of social trends tells us not only where we are now and where we have come from, but also where we are headed.

The report brings together statistics and indicators for a range of areas of social concern: population, family, health, education, work, income and housing. It has particular relevance for decision makers and those involved in social policy, both within and outside government. But it is also intended for broader community use as a compendium of information about our changing society, and as a reference source for those wishing to participate in informed discussion and debate on social issues.

AUSTRALIAN SOCIAL TRENDS provides a statistical perspective on Australia's people, their activities, characteristics and social well-being. The information is presented both in summary tables of indicators and in a series of reviews exploring current social issues. These reviews aim to tell the story behind the numbers. In bringing data together, the reviews highlight connections and relationships. They raise questions as well as giving answers. An additional feature is the inclusion of international data.

Each issue of AUSTRALIAN SOCIAL TRENDS will also serve as a window on the wide variety of social, demographic and labour statistics available from the many ABS collections, and from other sources. This first report contains a special feature chapter on religion in Australia, drawing principally on data collected in the 1991 Census. Future issues will contain special features on other topics, new reviews, and updated and expanded summary tables and international comparisons. It is hoped that, with time, this annual series will provide an invaluable historical perspective on social change in Australia.

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Australian Statistician

Australian Bureau of Statistics Canberra ACT May 1994

#### **Acknowledgements**

AUSTRALIAN SOCIAL TRENDS 1994 was developed in the Social Analysis and Reporting Section, ABS Canberra, managed and coordinated by Marion McEwin.

Main authors were: Natalie Bobbin, Norma Briscoe, Tim Carlton, Keith Mallett, David Povah, Michael Pucar, Dona Seneviratne, Arnold Strals (ABS Adelaide), Trudi Williams, Beth Wright and Greg Wyncoll. In addition, Michael Bittman and Tetteh Dugbaza contributed extracts from forthcoming publications. Technical support was provided by Bob Dutton and clerical support by Yvonne Freeman. The report was edited by Dot Russell.

In addition to the valuable advice and comments provided by many ABS staff members, the project team also wishes to acknowledge the external contributions of Mike Giles, the Australian Institute of Family Studies, the Australian Institute of Health and Welfare and the Bureau of Immigration and Population Research.

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#### Symbols

The following symbols used in tables mean:

- n.a. not available
- n.y.a. not yet available
- .. not applicable
- nil or rounded to zero
- p preliminary figures or series subject to revision
- subject to high sampling variability
- \*\* data suppressed due to unacceptably high sampling variability

#### Other usages

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

Unless otherwise stated, where source data used in the calculation of percentages included a non-response category (i.e. not stated), it has been excluded from the calculations. Total numbers shown with such percentages include the number of non-responses.

#### **Enquiries about these statistics**

General enquiries about the content and interpretation of statistics in this publication should be addressed to:

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Contacts for detailed enquiries are listed at the end of each review.

Enquiries about the availability of more recent data from ABS should be directed to Information Services in your nearest ABS office (see p. 209).

#### **ABS** publications and services

A complete list of ABS publications produced in Canberra and each of the State Offices is contained in the ABS catalogue of publications and products (1101.0) which is available from any ABS office.

In many cases, the ABS can also provide information which is not published or which is historical or compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in your nearest ABS office (see p. 209).

# **Population**

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In line with many other western industrialised countries, Australia's population is ageing. By 2041 the proportion of the population aged 65 years and over is expected to almost double.

# Population — national summary

COMPOSITION	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total population	.000	15 393	15 579	15 788	16 018	16 264	16 532	16 814	17 065	17 284	17 483	17 661
Male population	'000	7 686	7 778	7 883	8 000	8 118	8 249	8 388	8 5 1 1	8 615	8 711	8 797
Female population	'000	7 707	7 801	7 906	8 0 1 8	8 146	8 283	8 427	8 554	8 669	8 772	8 864
Median age	years	30.2	30.5	30.8	31.1	31.3	31.6	31.8	32.1	32.4	32.7	33.0
Dependency ratio	no.	0.52	0.52	0.51	0.51	0.50	0.50	0.50	0.49	0.50	0.50	0.50
Aged 0-14 years	no.	0.37	0.36	0.36	0.35	0.34	0.34	0.33	0.33	0.33	0.33	0.33
Aged 65 years and over	no.	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.18
Overseas born (of population)	%	21.1	21.0	21.1	21.2	21.5	22.0	22.4	8.55	22.9	23.0	22.8
Born in non-English speaking countries (of population)	%	11.6	11.6	11.7	11.8	12.1	12.4	12.8	13.1	13.3	13.5	13.5
Living in capital cities (of population)	%	63.6	63,5	63.5	63.8	63.9	63.9	63.8	63.7	63.6	63.4	n.y.a.
GROWTH	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Growth rate	%	1.38	1.21	1.34	1.46	1.53	1.65	1.71	1.49	1.28	1.15	1.02
Net overseas migration rate	/»	0.48	0.32	0.47	0.64	0.78	0.92	0.95	0.74	0.51	0.37	0.20
Rate of natural increase	~   %	0.85	0.84	0.82	0.78	0.79	0.77	0.79	0.79	0.83	0.78	0.82
Net reproduction rate	no.	0.92	0.90	0.91	0.90	0.88	0.88	0.88	0.73	0.89	0.91	n.y.a.
Crude birth rate (per 1,000	na.	15.8	15.3	15.4	15.2	15.0	14.9	14.9	15.4	14.9	15.1	n.y.a.
population) Crude death rate (per 1,000	no.	7.2	7.2	7.4	7.2	7.2	7.2	7.4	7.0	6.9	7.1	n.y.a.
population)  Permanent and long-term arrivals	'000	172.7	145.3	163.3	186.4	204.5	242.3	249.9	231.9	236.4	234.2	203.8
Refugee arrivals	'000	17.1	14.8	14.9	11.8	11.1	11.1	10.9	11.9	7.7	7.2	10.9
Permanent and long-term departures	'000	97,3	98.8	95.3	92.5	95.3	99.0	112.6	128.1	141.6	144.3	141.1
PROJECTIONS-SERIES A	Units	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	
Total population	'000	10.000	10 170	20.005	20.050	01.700			00.074		04.050	
Male population	'000									24 410		
Female population		9 065	9 538							12 007		
Median age	'000	9 143								12 403		
	years	34.0	35.4	36.6	38.0	39,0	39.7	40.4	40.9	41.4	41.8	
Dependency ratio	no.	0.50	0.49	0.49	0.49	0.52	0.55	0.58	0.61	0.63	0.65	
Aged 0-14 years	no.	0.32	0.31	0.30	0.29	0.28	0.28	0.28	0.29	0.29	0.29	
Aged 65 years and over	no.	0.18	0.18	0.19	0.21	0.24	0.27	0.30	0.33	0.35	0.36	
5-year average growth rate	%	1.05	1.03	0.95	0.84	0.76	0.70	0.63	0.54	0.45	0.36	

Reference systemic

Population estimates and projections are for 30 June. Population growth figures (except birth, death and net reproduction rates) are for the year ended 30 June.

# **Population — State summary**

COMPOSITION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total population	0000	1993	6 008.6	4 462.1	3 112.6	1 461.7	1 677.6	471.7	168.3	298.9	17 661.5
Male population	0000	1993	2 987.6	2 210.3	1 559.6	725.6	842.9	233.9	87.5	150.1	8 797.4
Female population	000	1993	3 021.0	2 251.8	1 553.0	736.1	834.8	237.8	80.8	148.8	8 864.0
Median age	years	1993	33.4	33.2	32.4	34.3	32.3	33.2	27.6	30.0	33.0
Dependency ratio	no.	1993	0.51	0.49	0.50	0.51	0.49	0.54	0.45	0.41	0.50
Aged 0-14 years	no.	1993	0.32	0.32	0.34	0.31	0.34	0.35	0.40	0.32	0.33
Aged 65 years and over	no.	1993	0.18	0.18	0.17	0.20	0.15	0.19	0.04	0.09	0.18
Overseas born (of population)	%	1991	23.1	24.4	16.8	22.5	29.3	10.7	18.1	23.6	22.9
Born in non-English speaking countries (of population)	%	1991	15.2	16.9	6.9	10.8	12.0	4.0	9.3	14.1	13.3
Living in capital city (of population)	%	1992	62.1	71.4	45.7	73.1	72.7	40.1	46.4	99.6	63.4
GROWTH	Units	Years	NSW	Vic.	Old	SA	WA	Tes.	NT	ACT	Aust.
Growth rate	%	1992-93	0.84	0.30	2.71	0.36	1.24	0.40	0.70	1.61	1.02
Net overseas migration rate	%	1992-93	0.25	0.20	0.15	0.12	0.31	0.03	0.05	-0.16	0.20
Net interstate migration rate	%	1992-93	-0.25	-0.68	1.70	-0.34	0.01	-0.29	-1.19	0,55	
Rate of natural increase	%	1992-93	0.84	0.77	0.86	0.58	0.91	0.66	1.84	1.23	0.82
Net reproduction rate	по.	1992	0.94	0.88	0.93	0.81	0.90	0.93	1.13	0.84	0.91
Crude birth rate (per 1,000	no.	1992	15.5	14.8	15.1	13.3	15.1	14.8	22.3	16.5	15.1
population)  Crude death rate (per 1,000	no.	1992	7.5	7.2	6.8	7.5	6.0	7.9	4.6	4.1	7.1
population) Permanent and long-term arrivals	'000	1992-93	83.7	48.1	29.2	9.9	22.3	2.0	1.4	5.5	203.8
Refugee arrivals	0000	1992-93	4.4	4.2	0.6	0.5	0.7	0.0	0.1	0.1	10.9
Interstate arrivals	1000	1992-93	94.5	59.7	117.0	26.8	33.1	12.4	16.2	21.4	
Permanent and long-term	'000	1992-93	57.9	32.9	20.9	6.8	14.3	1.6	1.1	5.3	141.1
departures Interstate departures	000	1992-93	110.4	88.9	66.7	31.4	32.4	13.5	18.1	19.6	
PROJECTIONS-SERIES A	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total population	'00ô	2041	7 941.4	5 282.2	5 853.8	1 622.3	2 786.2	537.7	294.9	540.0	24 858.4
Male population	000	2041	3 896.4	2 557.9	2 903.1	799.2	1 367.0	265.6	151.0	270.2	12 210.3
Female population	000	2041	4 045.0		2 950.7	823.1	1 419.2	272.1	143.9	269.8	12 648.1
Median age	years	2041	41.7	42.6	41.2	44.8	41.0	45.0	34.8	39.1	41.8
Dependency ratio	no.	2041	0.66	0.67	0.63	0.68	0.63	0.70	0.55	0.56	0.65
Aged 0-14 years	no.	2041	0.29	0.28	0.29	0.26	0.29	0.28	0.34	0.27	0.29
-											

Reference periods: Population estimates (except overseas born and born in non-English speaking countries which are Census based) and projections are for 30 June.

# Population — definitions and references

- Crude birth rate number of live births registered during the calendar year per 1,000 of the mean estimated resident population.

  Reference: Births, Australia (3301.0)
- Crude death rate number of deaths registered during the calendar year per 1,000 of the mean estimated resident population.

Reference: Deaths, Australia (3302.0)

- Dependency ratio the ratio of the dependent population (aged 0-14 years and 65 years and over) per person of working age (15-64 years).

  Reference: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0)
- Growth rate change in the population during the year expressed as a proportion (per cent) of the population at the beginning of the year.

  Reference: Australian Demographic Statistics (3101.0)
- Interstate arrivals arrivals from other States or Territories of Australia who intend to stay permanently. Reference: Australian Demographic Statistics (3101.0)
- Interstate departures permanent departures to other States or Territories of Australia.

  Reference: Australian Demographic Statistics (3101.0)
- Long-term arrivals persons arriving from overseas who intend to stay in Australia for one year or more and Australian residents returning from an overseas visit of one year or more.

  Reference: Overseas Arrivals and Departures, Australia (3404.0)
- Long-term departures departures of Australian residents who intend to stay temporarily overseas for one year or more and departures of visitors who had stayed in Australia for one year or more.

  Reference: Overseas Arrivals and Departures, Australia (3404.0)
- Median age the age at which half the population is older and half is younger.

  Reference: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0)
- Net interstate migration rate interstate arrivals (as defined) minus interstate departures (as defined) during the year, expressed as a proportion (per cent) of the population at the beginning of the year. Reference: Australian Demographic Statistics (3101.0)
- Net overseas migration rate permanent and long-term arrivals (as defined) minus permanent and long-term departures (as defined) during the year expressed as a proportion (per cent) of the population at the beginning of the year.

  Reference: Australian Demographic Statistics (3101.0)
- Net reproduction rate the number of daughters that a cohort of newborn female babies will bear during their lifetime, assuming fixed age-specific birth rates and a fixed set of mortality rates.

  Reference: Australian Demographic Statistics (3101.0)
- Non-English speaking countries all overseas countries except United Kingdom, Ireland, New Zealand, South Africa, Canada and the United States of America.

  Reference: Estimated Resident Population by

Country of Birth, Age and Sex, Australia (3221.0)

- Permanent arrivals persons arriving from overseas with the intention of settling permanently in Australia. It includes those with migrant visas, (regardless of stated intended period of stay), New Zealand citizens who indicate an intention to settle, and those who are otherwise eligible to settle e.g. overseas born children of Australian citizens. Reference: Overseas Arrivals and Departures, Australia (3404.0)
- Permanent departures Australian residents, including former settlers, who on departure state that they do not intend to return to Australia. Reference: Overseas Arrivals and Departures, Australia (3404.0)
- Population projections the ABS produces population projections using the cohort component method which takes a base year population for each sex by single years of age and advances it year by year by applying assumptions about future mortality and migration. Assumed age-specific fertility rates are applied to the female populations of child-bearing ages to provide the new cohort of births. This procedure is repeated for each year in the projection period for each State and Territory and for Australia. The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The assumptions underlying Series A most closely reflect prevailing trends and comprise: declining rates of mortality; a constant level of fertility (total fertility rate of 1.88 for Australia); low levels of overseas migration (rising to 70,000 per year by the year 2000 then remaining constant); and continuing high levels of interstate migration. Reference: Projections of the Populations of Australia, States and Territories, 1993-2041 (3222.0)
- Rate of natural increase the excess of births over deaths during the year expressed as a proportion (per cent) of the population at the beginning of the year.

  Reference: Australian Demographic Statistics (3101.0)
- Refugee arrivals comprises those who arrive under the refugee program (which provides protection for people who have fled their country because of persecution); those who arrive under the humanitarian programs (those who leave their country because of significant discrimination amounting to gross violation of human rights); and those who arrive under the Special Assistance Category (groups determined by the Minister to be of special concern to Australia and in real need but who do not come under the traditional humanitarian categories. It includes those externally displaced people who have close family links with Australia). Reference: Bureau of Immigration and Population Research Australian Immigration Consolidated Statistics

## **Aboriginal and Torres Strait Islander people**

#### COMPOSITION

At the 1991 Census
265,459 Australians
identified
themselves as
being of Aboriginal
or Torres Strait
islander origin.

Australia's Aboriginal and Torres Strait Islander population is recognised as a socially and economically disadvantaged group within Australian society and is the focus of much social research, government policy and political debate. Provision of reliable national data on Aboriginal and Torres Strait Islander people is an important priority for government and has led to improvements in census coverage and collection methodology, and to the development of the National Aboriginal and Torres Strait Islander Survey.

At the 1991 Census, 265,459 persons, representing 1.6% of the population, identified themselves as being of Aboriginal or Torres Strait Islander origin. Of these 26,884 stated Torres Strait Islander origin and 238,575 stated Aboriginal origin.

#### **Geographic distribution**

Aboriginal and Torres Strait Islander people comprised only a small proportion of the population in all States except the Northern Territory where more than one in five were Aboriginal. However, the numbers of Aboriginal people were larger in New South Wales, Queensland and Western Australia than in the Northern Territory, while over half of all Torres Strait Islanders were counted in Queensland.

#### Census counts

Counts and estimates of the indigenous population have been made in every national census since Federation (1901). However, in keeping with Section 127 of the Constitution, which was repealed in 1967, counts of full-blood Aboriginal people were not included in the official count of the Australian population until the 1971 Census.

Until 1966, indigenous people who lived in remote areas were not counted but estimates of their numbers were provided by welfare authorities. Since 1971 improvements in census procedures have been progressively implemented to improve the accuracy of the counts of the indigenous population and to enable collection of data from Aboriginal and Torres Strait Islander people which are as comprehensive and as reliable as the data collected from the rest of the Australian population.

27% of Aboriginal and Torres Strait Islander people lived in towns and cities of more than 100,000 people (major urban areas), compared to 63% of all Australians. About 32% lived in rural areas, compared to less than 15% of all Australians.

With the exception of the Northern Territory, the majority of indigenous Australians lived in urban centres with populations greater than 1,000 people; 41% lived in urban centres with population between 1,000 and 100,000 people compared to 22% of all Australians. In the Northern Territory 65% lived in rural areas; 26% in localities with a

Table 1

Aboriginal and Torres Strait Islander populations, 1991

	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	no.	no.	no.	no.	no.	no.	no.	no.	no.
Aboriginal people	65 133	13 739	55 474	14 640	41 003	7 621	39 285	1 680	238 575
Torres Strait Islanders	4 886	2 996	14 650	1 592	776	1 264	625	95	26 884
Total indigenous population	70 019	16 735	70 124	16 232	41 779	8 885	39 910	1 775	265 459
	%	%	%	%	%	%	%	%	%
Preportion of total indigenous population	26.4	6.3	26.4	6.1	15.7	3.3	15.0	0.7	100.0
Proportion of total State population	1.2	0.4	2.4	1.2	2.6	2.0	22.7	0.6	1.6

Table 2

Geographic distribution of the indigenous population, 1991

Geographic area	NSW	Vic.	Qld	SA	WA	Tæs.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Major urban	37.7	44.6	23.7	41.2	24.5	20.7		88.4	26.7
Other urban	44.3	41.0	43.4	28.7	42.0	48.1	34.6		40.9
Rural locality	5.6	2.5	17.1	14.9	15.0	9.5	26.3		13.7
Other rural	12.4	11.9	15.7	15.2	18.6	21.6	39.1	11.6	18.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

total population of between 200 and 999, and 39% in communities of less than 200 people.

nmunities of less than 200 people. th

#### Mobility

At the national level, similar proportions of indigenous and non-indigenous people (45% and 43% respectively) had changed their address between 1986 and 1991. There were significant differences across Australia, however. Mobility levels among Aboriginal and Torres Strait Islander people were around 50% in the States, 63% in the Australian Capital Territory and 22% in the Northern Territory. The mobility of Aboriginal and Torres Strait Islander people was slightly greater than that of the rest of the population, except in Queensland and Western Australia (where mobility rates were about the same), and in the Northern

Territory (where the mobility rate was less than half).

Interstate movement was relatively low among Aboriginal and Torres Strait Islander people. 1% of those who had changed address between 1986 and 1991 had moved interstate compared to 15% of all Australians who had moved. 95% of all indigenous people who moved stayed within the same statistical local area (SLA).

#### Age and sex composition

The Aboriginal and Torres Strait Islander population has a much younger age profile than the non-indigenous population, a reflection of higher fertility rates and lower life expectancy. At the 1991 Census, 40% of the total indigenous population were children aged less than 15 years and 15%

Figure 1

Proportion of people who changed address between 1986 and 1991

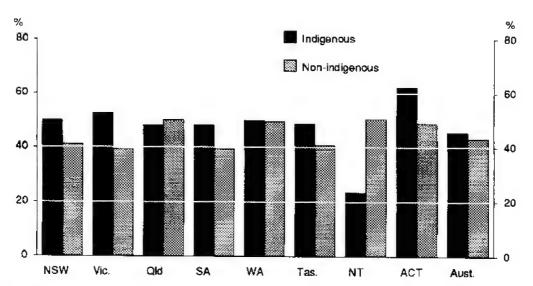


Table 3 Indigenous people who changed address between 1986 and 1991

Type of movement	NSW	Vic.	Old	SA	WA	Tas.	NT	ACT	Aus1.
	%	%	%	%	%	%	%	%	%
Moved interstate	8.0	1.6	0.8	1.4	0.7	8.0	2.1	4.9	1.0
Changed SLA(a) within State	3.4	3.0	3.7	4.4	4.8	2.4	4.1	1.0	3.8
Changed address within SLA(a)	95.6	95.1	95.2	93.9	94.0	96.7	93.4	93.8	94.9
	no.	no.	no.	nō.	no.	no.	no.	no.	na.
Total	28 111	7 048	27 453	6 270	16 475	3 599	7 624	906	97 486

(a) Statistical Local Area

Source: Census of Population and Housing

were aged less than 5 years. This was almost double the proportion that these age groups represented in the non-indigenous population. There were proportionally fewer older people; 6% of the indigenous population was aged 55 years or more compared to 20% of the non-indigenous population. The age distributions of the indigenous population were generally similar in all States and have changed relatively little over the last three censuses.

Overall, there were 98 men for each 100 women in the indigenous population, a sex ratio slightly lower than that of the non-indigenous population.

#### Population growth

Between 1976 and 1991, the number of Aboriginal and Torres Strait Islander people counted in the census increased by 104,500 or 65%. However, this does not mean that the indigenous population grew by 65% in this period. In addition to natural increase there are several factors which have contributed to the increased census count. These include improved coverage and the implementation of special field procedures for indigenous people living in remote areas; involvement of Aboriginal and Torres Strait Islander people and organisations in the collection process and in census awareness campaigns directed specifically at indigenous people; and,

Figure 2

Age and sex profile, 1991

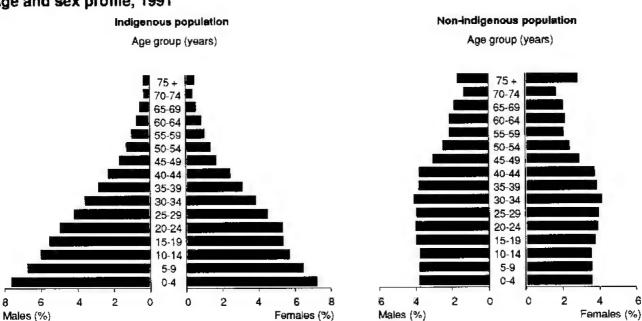


Table 4

Growth of the indigenous population

#### 1976 1986 1991 1976-91 1986-91 no. no. no. **New South Wales** 40 450 59 011 70 019 73.1 18.7 Victoria 14 760 12611 16 735 134 32.7 Queensland 41 343 61 268 70 124 69.6 14.5 South Australia 10 714 14 291 16 232 51.5 13.6 Western Australia 37 789 26 126 41 779 59.9 10.6 Tasmania 2 942 6716 8 885 202.0 32.0 Northern Territory 23 750 34 739 39 910 68.0 14.9 Australian Capital Territory 828 1 220 1 775 114.4 45.5 Total indigenous population 160 913 227 645 265 459 65.0 16.6 Total Aboriginal population 144 381 206 104 238 575 65.2 15.8 Total Torres Strait Islander population 16 531 21 541 26 884 62.6 24.8

Source: Census of Population and Housing

# For more information

- Australia's Aboriginal and Torres Strait Islander Population (2740.0)
- Detailed inquiries:

   Director, National
   Aboriginal and
   Torres Strait Islander
   Statistics Unit
   (989) 43 2192;
   Director, Aboriginal
   and Torres Strait
   Islander Survey
   (06) 252 7371
- General inquiries:
   see p. 209

possibly, an increased tendency for people of Aboriginal or Torres Strait Islander origin to identify themselves as such. Currently it is not possible to measure how much of the apparent growth is due to natural increase since data on Aboriginal and Torres Strait Islander births and deaths are incomplete.

# Developments in the collection of data on Aboriginal and Torres Strait Islander people

Increase

Increas

The Royal Commission into Aboriginal Deaths in Custody (1987-91) highlighted the need for more detailed, accurate, and nationally comparable data about Australia's indigenous population. A direct response to the Commission's report was the development of the national Aboriginal and Torres Strait Islander Survey to be conducted in 1994 with full participation of indigenous people at all levels. The survey has been designed to gather data on a wide range of social, demographic, health and economic characteristics of the indigenous population.

In addition to the national survey, the ABS is continuing its efforts to improve the quality of census data and, in conjunction with the Australian Institute of Health and Welfare, to ensure that all State and Territory Registrars make provision for identification of Aboriginal or Torres Strait Islander origin on birth and death registration forms.

## Birthplaces of Australia's settlers

#### POPULATION GROWTH

The UK continues to be the largest source of settlers despite a more varied immigration program in recent years.

Since 1788 Australia's population has been subject to continuous cycles of growth and structural change. While this has been mainly due to Australia's immigration policies, it has also been a reflection of events and economic conditions both within Australia and in the rest of the world. Such events include the transportation of convicts, the gold rush in the 1850s which included substantial Chinese immigration, the development of the Queensland sugar industry around the turn of the century, and wars, particularly World War II which resulted in substantial migration of displaced persons. Trans-Tasman migration, which has always been unrestricted, has fluctuated in response to relative economic conditions in New Zealand and Australia.

#### Australia's immigration policy

Throughout most of this century government policy has actively determined the cultural mix of immigration, and hence of Australian society. Until the late 1940s, there was a deliberate effort to encourage immigrants from the United Kingdom and Ireland. This policy was relaxed in the immediate post-war period to encompass other Europeans but, at the same time, it discouraged and even rejected settlers from countries which were

#### **Immigration**

In compiling estimates of the population both settler arrivals and visitors intending to stay 12 months or more (long term arrivals) are included in the category of permanent inward movement.

This review examines the settler component of overseas migration. This comprises:

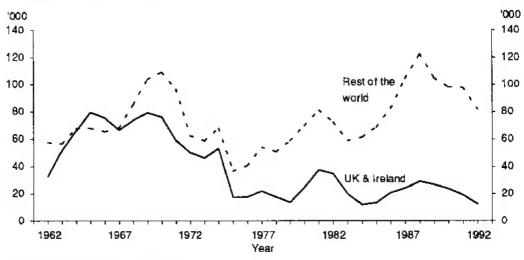
- people holding migrant visas, regardless of intended period of stay;
- New Zealand citizens who indicate an intention to settle;
- those otherwise eligible to settle e.g. overseas born children of Australian citizens.

perceived as too dissimilar to the dominant Anglo-Celtic culture of Australia at the time. It was thought that immigrants from such cultures would be unable to assimilate into the 'Australian way of life', a stated aim of the migration policy of the day.

The policy was gradually relaxed throughout the 1950s and 1960s and in 1972 the last remnants of the 'white Australia policy' were officially abolished with the announcement that future immigration was to be based on the '...avoidance of discrimination on any grounds of race or colour of skin or nationality'. Since that time, policies have actively encouraged a greater ethnic mix by

Figure 1

Sources of settler arrivals



emphasising equality of access for all groups. In 1977 Australia as a Multicultural Society<sup>2</sup> presented a charter that highlighted three main issues; social cohesion, cultural identity, and equality of opportunity and access. A 1982 policy discussion paper suggested a fourth principle of '...equal responsibility for, commitment to, and participation in society'<sup>3</sup>. Multiculturalism is gradually becoming part of the Australian ethos with cultural diversity seen as advantageous rather than detrimental.

#### The post-war period

At the 1947 Census, one-tenth of Australians had been born overseas and of these, 81% had been born in English speaking countries. At the 1991 Census, one-quarter had been born overseas, 42% in English speaking countries. This change was accompanied by increasing diversity of the birthplaces represented in Australia. At the 1947 Census the five most common countries of birth (UK & Ireland, New Zealand, Italy, Germany and Greece) accounted for 87% of overseas born Australians. At the 1991 Census, the five most common countries of birth were UK & Ireland, New Zealand, Italy, Yugoslavia and Greece but these accounted for only 53% of overseas born Australians. The UK & Ireland, historically Australia's major source of settlers, remains the single most common country of birth of immigrants although its contribution has been reduced significantly,

from 73% in 1947 to 42% in 1961 and 31% in 1991.

From the 1960s to the mid-1970s, settlers born in the UK & Ireland made up almost half of total settler arrivals. In 1965 and 1966, there were more settlers from UK & Ireland than from the rest of the world put together. Since the mid-1970s, however, the number of settlers from the rest of the world has increased substantially (reflecting Australia's broadening immigration policy) while the number from UK & Ireland has remained relatively steady. Of the 1992 intake of settlers, 12,300 had been born in the UK & Ireland and 82,000 in the rest of the world.

Apart from the UK & Ireland, the other major. source countries of settlers have changed markedly in the last 30 years. In the early 1960s, European countries particularly Italy and Greece predominated, and the six most common countries of birth accounted for 80% of settler arrivals. By the early 1970s, USA and New Zealand were represented in the top six countries, which in total accounted for 63% of settler arrivals. In the late 1970s Viet Nam began to become an important source of settlers and in the period 1981-85 was ranked third. The most recent period (1988-92) has seen a continuation of migration from Asia with four of the top six source countries in being Asian.

Table 1

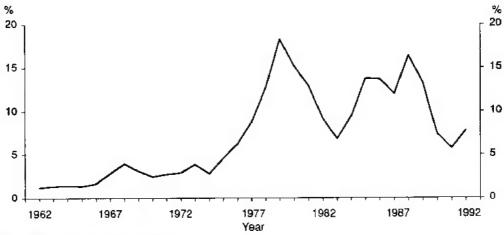
Top six source countries of birth of settlers

Country	1961-65		Country	1971-75	
	'000	%	· · · · · · · · · · · · · · · · · · ·	'000	%
UK & Ireland	267.3	46.4	UK & Ireland	227.2	41.4
Italy	67.3	11.7	Yugoslavia(a)	39.2	7.2
Greece	65.6	11.4	Greece	21.2	3.9
Yugoslavia(a)	25.6	4.4	USA	20.0	3.7
Malta	19.5	3.4	Italy	18.5	3.4
Germany	17.8	3.1	New Zealand	18.5	3.4
Country	1981-85		Country	1988-92	
	,000	%		'000	%
UK & Ireland	116.8	25.4	UK & Ireland	110.3	17.9
New Zealand	48.6	10.6	New Zealand	65.2	10.6
Viet Nam	47.2	10.3	Hong Kong	49,2	8.0
Philippines	15.4	3.4	Viet Nam	47.6	7.7
Poland	14.8	3.2	Philippines	35.0	5.7
South Africa	12.2	2.7	Malaysia	27.4	4.4

(a) Includes Yugoslavia and former Yugoslav republics.

Figure 2

Settlers born in New Zealand



Source: Overseas Arrivals and Departures

#### Selected countries

Migration between Australia and New Zealand has always been unrestricted. In the post-war period to the mid-1960s, much of the trans-Tasman migration was the onward migration of British settlers<sup>4</sup>. At that time, Australia's intake of people born in New Zealand was low. Since then there have been three distinct waves of immigration of the New Zealand born. From the mid-1970s, the intake rapidly increased to a high of 18% of Australia's immigration program in 1979. In the early 1980s the intake fell but rose in 1985 and again in 1988. In 1992, 8% of Australia's settlers had been born in New Zealand, representing an outflow of 2,000

per million (or 1 in 500) of the New Zealand population.

Italy and Greece both provided many of the settlers who came to Australia in the 1960s. However immigration of people born in these countries tapered off during the 1970s and 1980s and in 1992 the combined proportion of settlers born in these countries was less than 1% of the total intake.

The number of settlers born in Viet Nam increased dramatically in the 1970s and 1980s with refugees leaving Viet Nam during and after the Viet Nam war. Before 1976 Viet Nam was not separately recorded as a country of birth for settlers so it is not possible to get

Settlers born in Greece and Italy

Figure 3

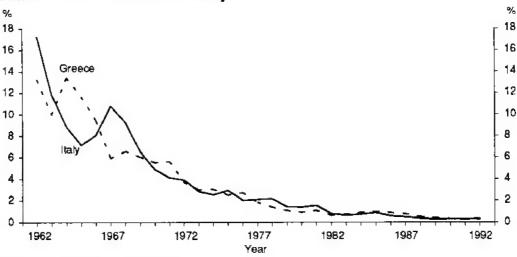
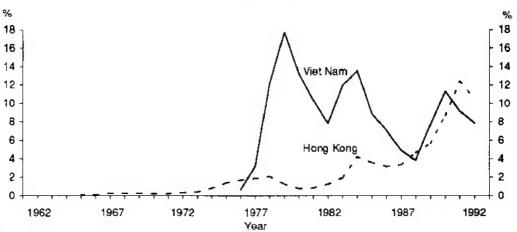


Figure 4
Settlers born in Viet Nam and Hong Kong



Source: Overseas Arrivals and Departures

an exact picture of settler intake prior to this time. However, there have been three peak periods for Vietnamese settling in Australia. The first was the initial intake of refugees in the late 1970s. The second, in 1983-84, was most likely a result of the 1982 agreement between the Australian and Vietnamese governments (the Orderly Departure Program) which allowed relatives of Vietnamese Australians to leave Viet Nam and migrate to Australia. The third peak in the late 1980s seems to have been mainly due to the family reunion scheme. Vietnamese born settlers accounted for 8% of all settlers who arrived in 1992 and represented an outflow

of 100 per million of that country's population.

In 1991 Hong Kong overtook Viet Nam and New Zealand as the second largest source of settlers. In 1992 settlers born in Hong Kong made up 10% of the total number of immigrants to Australia and represented an outflow of 1,700 per million of Hong Kong's population. It is expected that the prominence of Hong Kong as a major source of settlers is temporary as many citizens are choosing to leave prior to the reversion of government to China in 1997.

For more information

- Overseas Arrivals and Departures (3404.0)
- Detailed inquiries:
   Manager, Overseas

   Arrival and
   Departure Statistics
   (06) 252 6671
- General inquiries: see p. 209

Table 2

Top six source countries of birth of settlers, 1992

Country	Immigrants to Australia	Population of source country	Rate per million of source country's population
	No.	'000,000	no.
UK & Ireland	12 290	61.2	201
Hang Kong	9 820	5.8	1 693
Viet Nam	7 390	69.5	106
New Zealand	7 310	3.5	2 116
India	5 1 1 0	879.5	6
Philippines	4 930	65.2	76

Source: Overseas Arrivals and Departures; World Health Organisation World Health Statistics Annual

#### **Endnotes**

- 1 Jupp, J. (ed.) (1988) The Australian People: an encyclopedia of the Nation, its people and their origins.
- 2 Australian Ethnic Affairs Council (1977) Australia as a Multicultural Society.
- 3 Australian Council on Population and Ethnic Affairs (1982) Multiculturalism for All Australians: our developing Nationbood.
- 4 Carmichael, G. (ed.) (1993) Trans-Tasman migration: trends, causes and consequences.

## **Emigration**

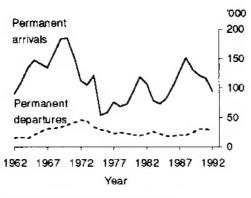
#### POPULATION GROWTH

Almost equal numbers of former settlers and other Australian residents left Australia permanently in 1992. More than half of them intended to settle in New Zealand, UK or Ireland.

Emigration is a component of net migration which has not previously had a high profile in public debate. Nevertheless, it is an issue of significance to Australia not only because of its impact on net migration targets, but also because it represents a potential net loss to Australia of skills, education, experience and capital. In particular, the departure of former settlers has been seen as an indicator of the success or otherwise of Australia's immigration program. Recent research suggests, however, that former settlers who emigrate should not be considered as 'failed immigrants'. Rather '...many settlers arrive with the specific intention of returning to their home country and the return can be viewed as a successful outcome of their

## Figure 1

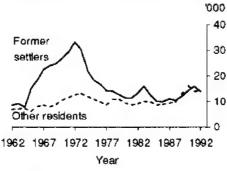
# Permanent arrivals and departures



Source: Overseas Arrivals and Departures

Figure 2

#### Permanent departures



Source: Overseas Arrivals and Departures

#### **Emigration**

Permanent departures of people from Australia are categorised as:

- former settlers includes departures of people born overseas who migrated to Australia at some stage previously;
- other residents includes departures of Australian born people (including Australian born children of former settlers) and overseas born children of Australian citizens.

migration. In addition,...a significant group of the returnees who move back to their origins have made a substantial contribution to Australia through long years of participation in the work force.'

Permanent departures provide an imperfect measure of the total loss of population. In many cases travellers do not intend to leave permanently but subsequently do so. Conversely, some who declare that they are leaving permanently change their plans and return. This is referred to as category jumping. It has been estimated that in the 1970s and 1980s, reported permanent departures accounted for only about 60% of the actual loss<sup>2</sup>. More recently category jumping has accounted for an even greater proportion of total loss.

Over the last 30 years emigration has ranged between 15,000 and 46,000 with an annual average of 26,500 people leaving permanently each year. Permanent arrivals have fluctuated more widely. People leaving Australia permanently comprise former settlers and other residents. Over the last 30 years the number of other residents departing has been fairly steady, averaging about 10,000 each year, although there have been short term variations reflecting changes in economic and political conditions in Australia and overseas. The number of former settlers departing has varied much more and shows an association with the number of permanent arrivals, with the peaks and troughs of immigration being reflected in emigration three to five years later.

#### Age and sex

In 1992, 14,040 former settlers and 14,090 other residents left Australia permanently.

Table 1

Permanent departures by age, 1992

Age group Former se		ettiers		Other resi	dents	Total Permanent	Total Australian		
	Males	Females	Total	Malos	Females	Total	departures	population	
	%	%	%	%	%	%	%	%	
Under 15	16.4	15.6	16.0	30.7	29.3	30.0	23.0	21.8	
15-24	10.4	12.7	11.6	12.3	16.2	14.3	12.9	15.8	
25-34	26.9	29.5	28.2	26.3	27.3	26.8	27.5	16.2	
35-44	20.3	18.1	19.2	16.3	14.7	15.5	17.4	15.1	
45-54	11.4	9.0	10.2	8.2	6.9	7.6	8.9	11.3	
55-64	7.1	6.8	6.9	3.5	2.9	3.2	5.0	8.4	
65 and over	7.5	8.4	8.0	2.7	2.6	2.6	5.3	11.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Overseas Arrivals and Departures

28% of emigrants were aged 25-34 years and a further 23% were aged under 15 years, suggesting that a large component of emigration is young family groups. These age groups also have higher than average mobility rates in other migratory movement (immigration and internal migration). Along with people aged 35-44 years these age groups were over-represented among emigrants when compared to the age distribution of the total population. The age distribution of former settlers departing permanently is older than that of other residents departing, but it should be noted that other residents include the Australian born children of former settlers.

In recent years there has been discussion concerning former settlers who return to

their country of origin on retirement or after a major life change e.g. the death of a partner. Among former settlers, younger people (up to 45 years of age) are more likely to leave Australia than people aged 65 years and over. However, of those aged 65 years and over who departed permanently, former settlers are more likely to emigrate than other residents. In 1992 former settlers aged 65 years and over accounted for 8% of all former settlers departing permanently, more than three times the equivalent proportion of other residents. In comparison, persons aged 65 years and over comprised 14% of the overseas born population and 11% of the total population. It should be noted that these aggregated figures mask considerable variation between birthplace groups.

Table 2
Occupations, 1992

Occupations	Former settlers	Other residents	Total departures	Total arrivais	All Avstralians
	%	%	%	%	%
Managers and administrators	12.2	14.1	13.1	11.6	11.3
Professionals	19.6	30.8	25.1	35.4	13.9
Para-professionals	8.0	10.7	9.3	8.2	6.1
Tradespersons	21.4	11.9	16.8	18.2	15.0
Clerks	14.1	13.2	13.6	10.4	16.7
Salespersons & personal service workers	10.0	9.9	10.0	7.3	15.3
Plant & machine operators, & drivers	4.9	3.1	4.0	3.5	7.1
Labourers & related workers	9.6	6.3	8.0	5.3	14.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Overseas Arrivals and Departures, Labour Force Survey

Overall slightly more females than males left Australia permanently in 1992 (14,300 compared to 13,800). Young women (aged 15-24 years) were more likely to leave than young men regardless of whether they were former settlers or other residents.

#### Skills

The occupations and skills of people leaving Australia have significance because they can change the overall characteristics of net migration if they differ markedly from the occupations and skills of those migrating to Australia.

In 1992, 53% of permanent departures (51% of former settlers and 54% of other residents) did not state their occupation or had no occupation, compared to 57% of all permanent arrivals. Of those emigrants who did state an occupation, the difference between former settlers and other residents was quite marked. In particular, former settlers were less likely than other emigrants to have been managers and administrators, professionals or para-professionals, and were almost twice as likely to have been tradespersons.

Of all emigrants with stated occupations, 25% were in the professional category but this was more than offset by professional immigration. Similarly, the proportion of emigrants who were tradespersons was smaller than the equivalent proportion of immigrants. In recent years the growth of international business has encouraged the development of an internationally mobile

skilled labour force. Australia is one of many countries affected by the long-term movement of skilled labour. In 1992 almost two-thirds of emigrants (and three-quarters of immigrants) were managers and administrators, professionals, para-professionals or tradespersons, compared to less than half of the total population.

#### Destination

In 1992, the top five destination countries for emigrants were the same whether they were former settlers or other residents. This suggests that permanent movement is related as much to social and economic factors (e.g. job-related) or to a 'search for a better life', as to a return by former settlers to their countries of origin. However, the top countries in particular (New Zealand and UK & Ireland) are countries with which Australia has historical, cultural and economic links. They have been important to Australia both as sources of settlers as well as destinations for emigrants.

In 1972 over half of all former settlers departing went to UK & Ireland but this destination was less popular with other Australian residents departing in that year. This suggests that many former settlers were returning to their country of origin.

Migration between Australia and New Zealand has always been unrestricted. New Zealand has consistently been the most common destination for other residents but increased its share of former settlers

Table 3

Permanent departures to top 6 destination countries in 1992

Destination	Former	settlers		Destination	Other residents			
countries	1972	1982	1992	countries	1972	1982	1992	
	%	%	%		%	%	%	
New Zealand	13.2	35.4	32.3	New Zealand	27.7	47.2	30.5	
UK & Ireland	51.7	34.6	26.8	UK & Ireland	21.9	13.0	17.8	
USA	5.8	4.1	5.2	USA	7.8	11.3	11.4	
Hong Kong	0.3	0.4	2.9	Hong Kong	1.2	1.0	4.7	
Canada	2.7	2.3	2.3	Canada	4.4	3.8	2.9	
Italy	2.6	2.3	1.6	Singapore	n.a.	0.7	2.6	
Sub-total	76.3	79.1	71.2	Sub-total	п.а.	77.1	70.0	
	no.	no.	no.		na.	no.	no.	
Total departures	33 172	13 352	14 040	Total departures	12 709	9 141	14 090	

Table 4
Former settlers departing by period of residence, 1992

	Period of residence						
Top 10 countries of birth	Under 1 year	1-3 years	3-5 years	5-10 years	10-20 years	20 or more years	Total(a)
	%	%	%	%	%	%	no.
New Zealand	9.9	19.7	26.0	22.9	15.5	2.7	4 228
UK & Ireland	15.1	19.6	14.7	12.9	17.7	19.4	4 132
USA	21.2	22.3	17.1	18.1	11,4	8.8	386
Italy	8.5	12.6	5.3	7.3	15.0	51.4	247
China	20.0	26.0	25.1	12.8	10.2	6.0	235
Greece	5.5	6.0	8.3	14.2	15.6	50.5	218
Hang Kong	23.9	26.3	32.1	8.1	8.1	1.0	209
Canada	9.8	28.8	13.7	28.3	13.2	6.3	205
Germany	15.3	15.3	11.8	19.2	18.7	19.2	203
Spain	3.1	6.7	1.6	12.4	42.0	34.2	193
All former settlers	12.2	19.3	18.7	17.5	17.5	13.5	14 044

(a) Includes period of residence not stated.

Source: Overseas Arrivals and Departures

departing from 13% in 1972 to 35% in 1982 and 32% in 1992. This reflects increased immigration from New Zealand from the mid-1970s (see *Birthplaces of Australia's settlers* p. 9) and the subsequent return of former settlers.

Other significant destination countries in 1992 were USA and Hong Kong. USA accounted for 11% of other residents departing and 5% of former settlers while Hong Kong was the destination of 5% of other Australian residents and 3% of former settlers. The economic opportunities offered by these two countries may well explain these departures. There has been a recent increase in the proportion of settlers born in Hong Kong (see Birthplaces of Australia's settlers p. 9) which could also be expected to have some impact on emigration destinations in the future. Overall settler loss of the Asian born has been low. However '...many business migrants from Asia still operate businesses in their home countries and accordingly spend substantial periods of time there. This represents a new form of settler loss and may have benefits for Australia.11

#### Period of residence

In 1992, 70% of all former settlers departing had lived in Australia for less than five years. 50% of former settlers from Hong Kong had lived in Australia for less than three years. Former settlers born in Hong Kong, USA or China had high rates of departure within a year of arrival as did former settlers born in UK & Ireland or Germany. These latter two groups, however, also had relatively high proportions of emigrants who had lived in Australia for 20 years or more.

More than half of Italian and Greek born emigrants and more than one-third of Spanish born emigrants had stayed in Australia for 20 years or more.

#### Return migration

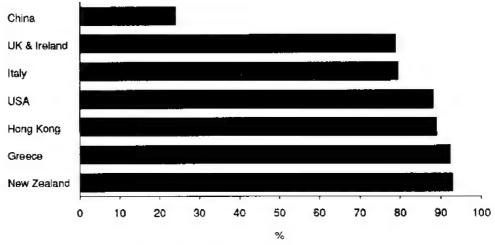
In financial year 1992-93, former settlers born in New Zealand and UK & Ireland were by far the largest birthplace groups leaving Australia. 93% of the New Zealand born and 79% of the UK & Ireland born were returning to their countries of birth. A further 11% of the UK & Ireland born were emigrating to New Zealand.

80% or more of former settlers born in Greece, Hong Kong, USA or Italy were returning to their countries of birth. Of Chinese born former settlers, 24% were returning to China and 49% were emigrating to Hong Kong<sup>3</sup>.

Onward migration refers to the departure of former settlers to countries other than their country of birth. When period of

Figure 3

Proportion of departing former settlers returning to their country of birth (selected countries), 1992-93



Source: Bureau of Immigration and Population Research

# For more information

- Overseas Arrivals and Departures (3404.0)
- Detailed enquires: Manager, Overseas
   Arrival and Departure
   Statistics
   (06) 252 6671
- General enquires: see p. 209

residence is examined in conjunction with return and onward migration, it would appear that many Greek and Italian born former settlers are returning to their birthplaces on retirement. Similarly, it is likely that the return migration of UK & Ireland born former settlers is occurring mainly among those who have lived in Australia for a considerable period of time. The onward migration of settlers born in UK & Ireland and that of the Chinese born is more likely to occur among those with short periods of residence.

#### **Endnotes**

- 1 Hugo, G. (1994) The economic implications of emigration from Australia Bureau of Immigration and Population Research.
- 2 Charles Price quoted in National Population Council (1990) Emigration National Population Report No.9.
- 3 Bureau of Immigration and Population Research (1994) Emigration 1992-93.

# Aboriginal and Torres Strait Islander fertility

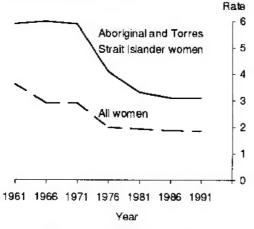
#### POPULATION GROWTH

The Aboriginal and Torres Strait Islander population has a much younger age structure than the rest of the population, a reflection of their higher birth rates and shorter life expectancy (see Aboriginal and Torres Strait Islander people p. 5). An examination of trends in the fertility rates of Aboriginal and Torres Strait Islander women provides insight into the likely future growth of the population and potential changes in its age profile.

In addition to consideration of the fertility of Aboriginal and Torres Strait Islander women, including those with non-Aboriginal partners, measures of Aboriginal fertility in terms of its population growth effect should also include consideration of Aboriginal children born to non-Aboriginal women i.e. those with Aboriginal fathers. In 1991, 43% of Aboriginal couple families with children had two Aboriginal parents, 32% had an Aboriginal mother and a non-Aboriginal father, and 25% had an Aboriginal father and a non-Aboriginal mother. These latter families contained 24% of all Aboriginal children in couple families. However, higher proportions were observed among younger children (27% of children under one year) compared to older children (21% of children aged 10-14 years). This suggests that Aboriginal children with non-Aboriginal mothers comprise an increasing share of the children in Aboriginal families. Information about them is

Levels of fertility among the Aboriginal and Torres Strait Islander population are considerably higher than those for the rest of the population.

Figure 1
Total fertility rate



Source: Birth Registrations; Census of Population and Housing; Gray (1983)<sup>1</sup>; Jain (1989)<sup>2</sup>; Dugbaza (1994)<sup>3</sup>

#### Total fertility rate

The fertility of a population is usually measured by the total fertility rate. This is the average number of children that a woman could expect to bear by the end of her reproductive life span if she were to bear children throughout her lifetime according to the prevailing age-specific fertility rates. The age-specific fertility rate is the number of births in a given time period to women of a particular age group, usually expressed per 1,000 women in that age group.

#### Estimating Aboriginal fertility

The total fertility rate is usually derived from birth registrations data. However, most States have only recently included an identifier of Aboriginal and Torres Strait Islander origin on birth registration forms. There are thus insufficient data currently available to enable adequate estimates to be made. Calculations of Aboriginal fertility have therefore usually been based on five-yearly population census data. It has also been possible to derive estimates for some States using data from two other sources: Aboriginal birth registrations in South Australia and the Northern Territory; and data from the midwives' collections which are a set of health and demographic data on women during confinement, routinely collected by the health departments in some States and Territories. A comparison of the different methods of estimating Aboriginal fertility is presented in a recent paper by Dugbaza3.

The method of deriving fertility estimates from a population census using data on the relationships between household members is termed the 'own-children' method'. The estimates are averages for the five-year period ending at the census date. While the total fertility rate is satisfactory, the estimates understate fertility levels for the 15-19 years age group and overstate them for the 40 years and over age group. Unless otherwise stated the estimates presented in this review are based on this method.

consequently an important supplement to fertility measures calculated for Aboriginal women.

#### Fertility levels and trends

Estimates from the 1991 Census<sup>3</sup> indicate that the total fertility rate of Aboriginal women is about 3.1 children per woman, over 50% higher than the figure of 1.9 for total women. Over the last 30 years, there has been a substantial decline in fertility for both Aboriginal and non-Aboriginal women.

Accompanying this has been a narrowing of the fertility differential between Aboriginal and non-Aboriginal women. In the 1960s, Aboriginal fertility, at about 6.0 children per woman, was about twice the rate for total women.

Fertility declines for both Aboriginal and non-Aboriginal women over the last 30 years have followed a similar pattern with the sharpest decrease recorded during the 1970s. However, the fertility decline for non-Aboriginal women commenced in the 1960s while for Aboriginal women fertility was largely stable in the 1960s followed by a sharp decline in the early 1970s. In the ten years to 1991, the fertility of both populations has been reasonably stable.

#### Age-specific fertility

Aboriginal women have children at younger ages than non-Aboriginal women. Fertility among 15-19 year old Aboriginal women was more than five times higher than among all 15-19 year old women in 1991. Among 20-24 year olds, Aboriginal fertility was about two and a half times higher. Aboriginal fertility peaks in the 20-24 years age group while for the total population the peak child-bearing ages are 25-29 years. The fertility of women aged 30 years and over is similar in both the Aboriginal and total Australian populations. Aboriginal women aged 15-24 years contributed over 75% of the difference in the total fertility rate between Aboriginal women and all Australian women. The earlier age at commencement of child-bearing by

Aboriginal women, and the higher fertility of 15-24 year old Aboriginal women are most responsible for the higher fertility of Aboriginal women.

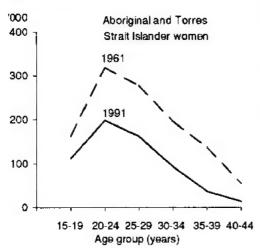
#### Trends in age-specific fertility

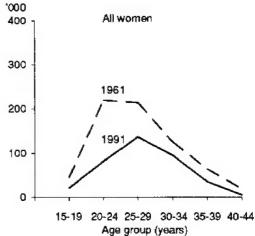
Over the past 30 years declines in Aboriginal fertility have occurred in all age groups. Older women experienced proportionally larger declines than younger women. The smallest fall in relative terms was among the 15-19 years age group, so that the contribution of this group to the total fertility of Aboriginal women has increased relative to that of other age groups. In 1961, the age-specific fertility rate of 15-19 year old Aboriginal women was 80% that of 30-34 year olds. In 1991 the fertility of 15-19 years olds was just as high as that of 30-34 year olds.

The net effect of this has been a decline in the average age of Aboriginal mothers at child-bearing. In comparison, the average age of women at child-bearing in the total population has been increasing. The trend towards younger ages of Aboriginal mothers may continue. On the other hand, the contribution of the different age groups to total Aboriginal fertility in 1991 is not dissimilar to that for the total population in 1971, when much higher fertility was observed in the 15-24 years age group. It is possible that Aboriginal fertility will in the future move further towards that of non-Aboriginal women.

Figure 2

Age-specific fertility rates

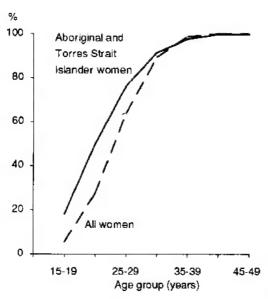




Source: Birth Registrations; Census of Population and Housing

Figure 3

Cumulative contribution to total fertility, 1991



Source: Census of Population and Housing

#### Contribution of age groups

In 1991, Aboriginal women under 25 years contributed about half of total Aboriginal fertility, while the contribution to total fertility of all women under 25 years was only a little over a quarter. Correspondingly, in the total population, older age groups contributed more to total fertility than older Aboriginal women did to total Aboriginal fertility. For example, women aged 25-34 years contributed about 63% of total fertility compared to 41% of Aboriginal fertility.

The contribution of a particular age group to the total births in a population depends on the age-specific fertility rate as well as the relative size of the age group in the population. Not only do younger Aboriginal women have higher fertility rates but they also comprise a higher proportion of Aboriginal women of child-bearing ages relative to the total population. In 1991, 40% of Aboriginal women aged 15-49 years were under 25 years of age compared to 30% of all women aged 15-49 years.

#### State/Territory differences

Aboriginal fertility varies between States as does the fertility differential between the Aboriginal and the total population. The highest rates of Aboriginal fertility were

Table 1

#### Total fertility rates, 1991

State	Aboriginal population	Total population
	no.	NO.
NSW	3.0	1.9
Vic.	3.0	1.8
Qld	3.2	1.9
SA	3.0	1.7
WA	3.6	1.9
Tas.	2.6	1.9
NT	3.4	2.3
ACT	2.6	1.8
Total	3.1	1.9

Source: Birth Registrations; Census of Population and Housing: Duobaza (1994)<sup>2</sup>

recorded in Western Australia and the Northern Territory (3.6 and 3.4 respectively) and the lowest rates in Tasmania and the Australian Capital Territory (both 2.6). In most States and Territories the Aboriginal population represents only a small proportion of the total population (see Aboriginal and Torres Strait Islander people p. 5), and the fertility of the non-Aboriginal population can be approximated by the fertility of the total population. In the Northern Territory, however, Aboriginal people comprise about a quarter of the total population and the total fertility rate for the Northern Territory is significantly higher than that for other States and Territories (2.3 compared to 1.7-1.9). When the total fertility rate is calculated for the non-Aboriginal population of the Northern Territory, the figure of 1.9 conforms to the Australian аустаде.

Differences in fertility reflect differences in socio-economic factors including urbanisation, education and labour force status<sup>4</sup>. Studies by Gray<sup>5,6</sup> have shown that these factors also influence Aboriginal fertility which is higher in rural than in urban areas, and higher for Aboriginal women without post-school qualifications than for those with them.

The high Aboriginal fertility in Western Australia and the Northern Territory is associated with low proportions of Aboriginal people living in the capital city, low Aboriginal labour force participation and low proportions of Aboriginal people who stayed at school beyond the age of 15 years, relative to the Australian average. Correspondingly,

Table 2
Selected characteristics of the Aboriginal and Torres Strait Islander population, 1991

Characteristic	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Living in capital city	32	48	19	43	28	34	16	100	28
Left school aged 15 years or more	83	79	78	74	69	85	66	89	76
Labour force participation rate	57	61	56	56	49	63	41	69	54
Aboriginal families(a) with a non-Aboriginal mother	36	40	29	30	20	45	13	42	30

(a) Those families containing at least one Aboriginal parent or child.

Source: Census of Population and Housing

Tasmania and the Australian Capital Territory, where Aboriginal fertility is lowest, have the highest Aboriginal education levels and the highest Aboriginal labour force participation rates.

Overall, 30% of Aboriginal families had a non-Aboriginal mother in 1991. This proportion was considerably lower in the Northern Territory and Western Australia (13% and 20% respectively) and considerably higher in Tasmania and the Australian Capital Territory (45% and 42% respectively).

#### **Endnotes**

- 1 Gray, A. (1983) Australian fertility in decline Ph.D. thesis, ANU, Canberra.
- 2 Jain, S.K. (1989) Estimation of Aboriginal fertility, 1976-86: an application of the 'own children' method of fertility estimation ABS Occasional Paper (4127.0).
- 3 Dugbaza, T. (1994) Recent trends and differentials in Aboriginal fertility, 1981-1991 ABS Demography Working Paper No. 1994/1.
- 4 ABS (1992) Fertility in Australia (2514.0).
- 5 Gray, A. (1990) Aboriginal fertility: trends and prospects Journal of the Australian Population Association Vol. 7 no. 1.
- 6 Gray, A. (1992) Aboriginal population prospects Paper presented to the Australian Population Association Conference, Sydney, 1992.

#### For more information

- Australia's Aboriginal and Torres Strait Islander Population (2740.0)
- Detailed inquiries:
   Director,
   Demography
   (06) 252 6411
- General inquiries: see p. 209

## **Aged Australia**

#### DISTRIBUTION

Australia's population is ageing. This is due to the interplay of a number of factors. Most significantly Australians are having fewer children, later in life, and are living longer.

Services such as housing, health care and community-based support services are delivered to the aged at the local level. To aid the planning and delivery of these services it is useful to identify those areas with relatively high concentrations of aged people and those in which the aged population is growing rapidly. It should be noted, however, that the aged are not a homogeneous group with a single set of requirements. Simple indicators of growth and concentration, therefore, do not alone give an adequate measure of current or potential demand for services.

In this review the term *aged* is used to refer to the population aged 65 years and over.

#### Concentrations of the aged

The highest concentrations of aged people in Australia occur in resort/retirement areas and rural areas. The more remote areas and most areas within the capital cities have younger populations. In rural areas the concentrations of aged people are usually higher in the regional centres than in the farming areas.

The concentration of the aged varies depending on the level of the geographic classification being used. The greater the level of disaggregation, and the smaller the population, the more extreme the values will be. At the statistical division (SD) level, the degree of variation in the proportion of the

Table 1
Concentrations of aged people,

Statistical division		Proportion aged 65 years & over
		%
Yorke Lower North	SA	17.0
Wimmera	Vic.	15.4
Mid North Coast	N\$W	15.2
Richmond Tweed	NSW	14.8
Moreton	Qld	13.8

Source: Estimated Resident Population

#### Geographic classification

The Australian Standard Geographic Classification (ASGC) is designed to enable spatially classified statistics to be produced on a useful and comparable basis. It is used extensively for census statistics.

The primary geographic unit for the collection of census data is the census collection district (CD). CDs can be aggregated to form 1,346 statistical local areas (SLAs) which in turn can be aggregated to form 196 statistical sub-divisions (SSDs). The SSDs aggregate to 67 statistical divisions (SDs) which then aggregate to the 8 States and Territories, without gaps or overlap.

For more information see Australian Standard Geographic Classification (1216.0) and 1991 Census — Geographic Areas (2905.0).

population aged 65 years and over is fairly moderate, ranging up to 17% in the oldest SD (Yorke Lower North in South Australia), six percentage points above the national average.

In smaller geographic areas, higher concentrations may be found. For example, in New South Wales the coastal areas north and south of Sydney have relatively high concentrations of people aged 65 years and over, as do the farming communities inland. The remote areas of the far west, with the exception of Broken Hill, have relatively young populations. In the Victorian city of Stawell in the Wimmera, 17% of the population were aged 65 years or more in 1991, compared to 9% in the surrounding area.

Similarly, while 11% of the total population of Queensland were aged 65 years and over, in the SD of Moreton the proportion was 14%. Within Moreton, in the statistical subdivision (SSD) of Gold Coast City, the aged represented 17% of the total population, and in the statistical local area (SLA) of Coolangatta, 26% of the population were aged 65 years and over.

#### Growth and ageing

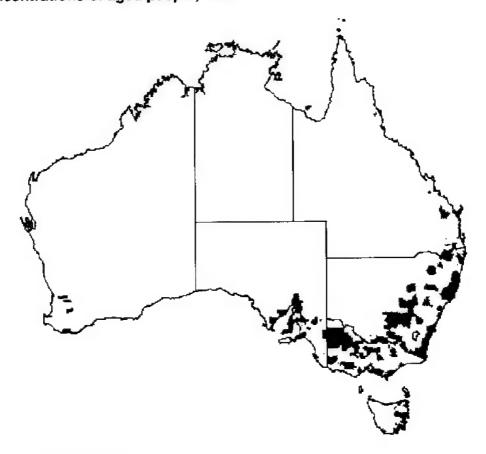
In the five years to 1991, Australia's total population grew by 8% while the aged population grew by 16%. Some of the most rapid increases in the number of aged people have occurred in resort/retirement areas,

Although most aged people live in the capital cities, many move to coastal resorts on retirement.

Figure 1

Concentrations of aged people, 1991

Statistical local areas in which more than 13% of the population were aged 65 years and over.



Source: Estimated Resident Population

particularly along the New South Wales coast north and south of Sydney, along the Murray River from west of Albury-Wodonga to Swan Hill (Victoria), in the south west of Western Australia, and in South Australia around the Fleurieu Peninsular and the lower Murray River area. There have also been large increases in rural areas in all States.

Some areas which already have high concentrations of aged people are continuing to age rapidly, not because of particularly high growth in the aged population, but because of slow, or even negative growth in the population aged under 65 years. For example, between 1986 and 1991, the number of people aged under 65 years in the Wimmera (Victoria) declined by 3% (including a decline of 15% among 15-24 year olds) while the number of people aged 65 years and over increased by 10%, well below the national average, but high enough to cause significant ageing of the area.

In other areas, rapid ageing is occurring due to growth in the aged population exceeding growth in the younger age groups. In the Mid North Coast of New South Wales the aged population grew by 28%, while the rest of the population grew by only 15%.

Still other areas with relatively large and rapidly growing aged populations are not ageing as fast because strong growth in the aged population is matched by similar growth in younger age groups. For example, in Moreton (Queensland) the number of aged people increased by 33% between 1986 and 1991. However, the number of people under 65 years increased by 30% so the proportion of the population who were aged increased only marginally.

# Ageing and interstate migration

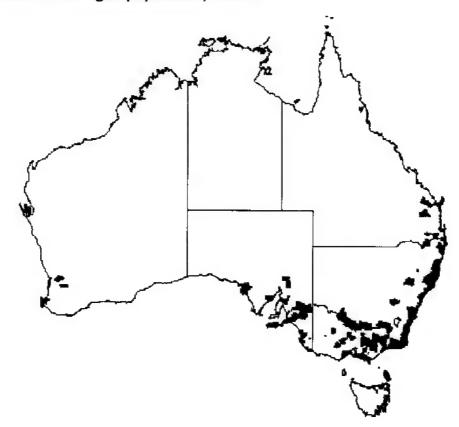
Mobility rates for people aged 65 years and over are much lower than for younger age

Figure 2

Growth of the aged population, 1986-91

Statistical local areas in which:

- the proportion of the population aged 65 years and over was greater than the national average (11.3%) in 1991; and
- the number of people aged 65 years and over grew by more than the national average (16%) in the period 1986-91.



Source: Estimated Resident Population

groups, and those aged people who do move are much less likely to move interstate.

Nevertheless, interstate migration is an important factor in the growth of the aged population, especially in Queensland. Between 1986 and 1991 Queensland had a net gain of 10,000 people aged 65 years and over, mainly from New South Wales and Victoria, accounting for 20% of the growth in its aged population. There were also large net gains in the younger age groups resulting in Queensland ageing at a slower rate than the national average, despite the large influx of aged people.

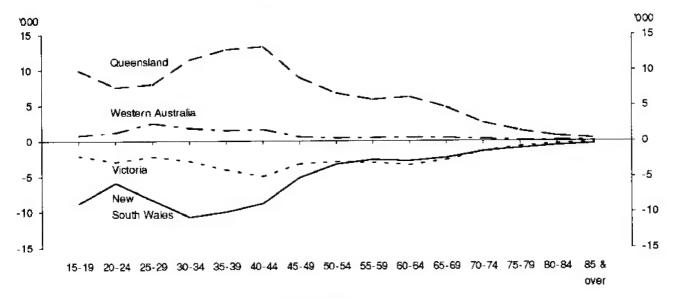
While the largest group of movers to Queensland were the 25-34 year olds, representing a quarter of all movers to Queensland, a large number of 25-34 year olds also moved away from Queensland. The largest net gain was among 35-44 year olds. It is older people however, who display the strongest preference for Queensland. Three times as many 55-74 year olds moved to Queensland as away from it in 1986-91.

Table 2
Interstate migration, Queensland, 1986-91

Age group (years)	Movers to	Movers from	Net gain	Movers to per mover from
	'000	0000	'000	no.
15-24	43.9	26.4	17.5	1.7
25-34	55.2	35.8	19.4	1.5
35-44	45.6	19.5	26.2	2.3
45-54	24.3	8.6	15.7	2.8
55-64	17.1	5.1	12.0	3.4
65-74	11.0	3.8	7.3	2.9
75-84	3.8	1.7	2.2	2.3
85 & over	8.0	0.4	0.4	2.2
Total	201.7	101.1	100.7	2.0

Figure 3

Net interstate migration 1986-91, selected States



Age group (years)

Source: Census of Population and Housing

Western Australia also experienced significant net interstate migration gain between 1986 and 1991. However, it was concentrated in the younger age groups.

#### Major magnet areas

While interstate migration contributes to rapid growth of the aged population in some areas, particularly in Queensland, much of the increase in coastal areas is due to net movement of the aged from the capital cities and inland areas in the same State. The combined effect of interstate and intrastate movement has been strongest in the major magnet areas of Richmond-Tweed and the

#### Major magnet areas

The term *major magnet area* refers to a statistical division (SD) in which the aged represented a higher proportion of the population than the national average of 11.3% in 1991, and in which over 40% of the growth in the aged population was due to net internal migration. Only four SDs met these criteria in 1991.

Major magnet areas also attract large numbers of visitors of all ages but they are excluded from this review, which is based on people's place of usual residence.

Table 3

Population growth in major magnet areas

		1991 population		Growth in the population, 1986-91		Net migration as a proportion of growth	
Statistical division		Total	Aged 65 & over	Aged 65 & over	Aged 0-64 years	Aged 65 & over	Aged 0-64 years
		000	%	%	%	%	%
Richmond-Tweed	NSW	179.5	14.8	29.5	16.4	44.8	60.6
Moreton	Qld	489.6	13.8	33.5	29.9	44.6	75.9
Wide Bay-Burnett	Qld	195.5	13.3	19.9	13.7	44.1	60.6
Mid North Coast	NSW	240.9	15.2	28.4	14.5	40.2	56.9
Total		1 105.5	14.2	29.2	21.0	43.6	69.0

Source: Census of Population and Housing: Estimated Resident Population

Table 4

Movement to and from major magnet areas, 1986–91

Age group	Movers to	Movers from	Net gein	per mover from
	,000	'000	'000	no.
15-34	186.3	162.4	23.8	1.1
35-54	141.5	97.9	43.6	1.4
55-64	45.9	25.1	20.8	1.8
65-74	32.5	20.4	12.1	1.6
75-84	12.8	10.0	2.8	1.3
85 & over	3.5	2.9	0.6	1.2
Total	422.5	318.8	103.7	1.3

Source: Census of Population and Housing

Mid North Coast in New South Wales, and Moreton and Wide Bay-Burnett in Queensland. Between 1986 and 1991 net movement into these areas accounted for 15,400 (44%) of the 35,400 increase in the aged population. 10% of the aged in these areas had moved there between 1986 and 1991.

While the major magnet areas attracted relatively large numbers of aged people, they also attracted large numbers of younger people, so the areas are not ageing as rapidly as some other areas. However, while net movement to the major magnet areas was

highest among those aged 35-54 years, the strongest preference was shown by those aged 55-74 years. In this age group, twice as many moved to the major magnet areas as away from them, indicating the attraction of these areas for people in pre-retirement and retirement.

#### Characteristics of movers

The tendency for couples to move to major magnet areas soon after, or even before, retirement is reflected in the lower than average proportion of widowed people, the equal proportions of men and women and the high proportion of 65-74 year olds moving to these areas.

However, widowed people (mainly women) were more likely to move away from the major magnet areas than to them. This may be associated with return movement following the death of a spouse, to support services such as family members and health institutions. The 1992 Survey of Families in Australia found that 22% of movers aged 65 years and over, and 39% of widowed movers aged 65 years and over, moved to be near family.

Aged people were less likely to move, particularly to or from the major magnet areas, if they were in the labour force than if they were retired.

For more information

- Estimated Resident Population by Age and Sex in Statistical Local Areas, Australia — Data on Floppy Disk (3208.0)
- 1991 Census —
   Community Profiles,
   Australia (2722.0)
- Detalled inquiries: Assistant Director, Demographic Statistics (06) 252 6516; Assistant Director, Population Census Consultancies & Profiles (06) 252 5934
- General inquiries:
   see p. 209

Table 5
Selected characteristics of aged people(a), 1986-91

Mobility status	Widowed	Female	income over \$20,000	in the labour force
	%	%	%	%
Moved to magnet areas	24.4	50.1	9.1	3.5
Moved from magnet areas	32.4	55.6	7.9	3.3
All movers	38.0	59.6	8.9	4.6
Non-movers	30.0	56.1	10.5	6.5
All aged people	32,0	57.1	9.8	6.3

(a) Proportion of each mobility status group with the characteristic.

# Projections of the aged population

#### PROJECTIONS

By 2041, the number of aged
Australians is expected to more than double to reach 5.5 million, representing 22% of the total population.

Australia's population is set to age rapidly in the next century, in common with many of the world's economically developed countries, and for similar reasons; decreased fertility and greater longevity associated with economic affluence.

Australia is among the younger of the highly industrialised countries of the world and, like them, is confronting the social and economic issues associated with a large and rapidly growing aged population. Among the most important issues forming government policies for the future are income support and the provision of health services and community support services for the aged.

In world terms Australia has a relatively large aged population. In 1992, 11% of Australia's population was aged 65 years or more, about the same as New Zealand and much higher than other close neighbours. In 1992 the aged accounted for 4% of the population of Indonesia and 2.5% of the population of Papua New Guinea (see *International table 1* p. 200).

#### Population growth

Under Series A assumptions, Australia's population is projected to grow by about 40% in the 48-year period 1993-2041, to reach a total of 25 million. There are large variations

#### Aged population

In this review aged are all persons aged 65 years and over. *Dependency ratios* for the aged and for children (aged 0-14years) are ratios per working age (aged 15-64 years) population.

#### **Projections methodology**

The ABS uses the cohort component method of population projection. This method takes a base year population for each sex by single years of age and advances it year by year by applying assumptions about future mortality and migration. Assumed age-specific fertility rates are applied to the female populations of child-bearing ages to provide the new cohort of births. This procedure is repeated for each year in the projection period for each State and Territory and for Australia. The resulting population projections for each year for the States and Territories, by sex and age in single years, are adjusted to sum to the Australian results.

The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The data presented here are from Series A because the assumptions (medium fertility, constant low overseas migration and high interstate migration) most closely reflect prevailing trends.

For detailed information on the assumptions underlying Series A, see *Projections of the Populations of Australia, States and Territories, 1993-2041* (3222.0).

Table 1

Projected growth of the population (series A)

State/Territory	Aged 65 ye	eers and over		Total population		
	1993	2041	Increase 1993-2041	1993	2041	Increase 1993-2041
	'000'	'000	%	'000	'000	%
NSW	734.8	1 759.3	139.4	6.008.6	7 941.4	32.2
Vic.	533.2	1 230.0	130.7	4 462.1	5 282.2	18.4
Qld	344.7	1 228.3	256.4	3 112.6	5 853.8	88.1
SA	196.0	405.6	106.9	1 461.7	1 622.3	11.0
WA	169.6	578.8	241.3	1 677.6	2 786.2	66.1
Tas.	57.7	134.2	132.4	471.7	537.7	14.0
NT	4.9	40.9	728.2	168.3	294.9	75.2
ACT	19.9	100.5	404.4	298.9	540.0	80.7
Australia	2 061.0	5 477.6	165.8	17 661.5	24 858.4	40.7

Source: Population Projections, 1993-2041: Series A

between the States and Territories in projected growth rates. Queensland is projected to experience the greatest proportional increase in population (88%) and to overtake Victoria as the second most populous State by 2031. Western Australia's population, which overtook South Australia's in 1983, is projected to increase by 66% and to outnumber South Australia's by 1.1 million in 2041. The population of the Australian Capital Territory is projected to increase by 81% and to overtake Tasmania's population by 2041. The Northern Territory is also projected to experience strong growth (75%) in the 1993-2041 period.

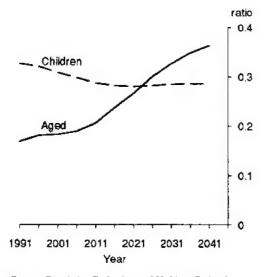
The fastest growing States and Territories will also experience the greatest growth in their aged populations. The aged populations in Queensland and Western Australia are expected to more than treble, in the Australian Capital Territory to increase five-fold and in the Northern Territory, eight-fold. This rapid growth is from a relatively low base, however, particularly in the Territories which have the youngest age profiles. In 2041 the aged will therefore still represent a relatively small proportion of the total population in the fastest growing States and Territories.

#### **Dependency ratios**

By the year 2026 the number of aged persons will exceed the number of children. The aged

Figure 1

Projected dependency ratios (series A)



Source: Population Projections, 1993-2041: Series A; Estimated Resident Population dependency ratio is projected (under series A assumptions) to increase fairly slowly, from 0.18 in 1993 to 0.21 in 2011, then more rapidly to 0.36 in 2041. During this period the child dependency ratio is expected to decline until 2011 and then to stabilise at around 0.29.

The decrease in the child dependency ratio implies a decrease in outlays on children's services. However, this will do little to offset the likely increase in outlays associated with ageing, particularly on health services and income support, which are much higher than the outlays associated with children<sup>1</sup>.

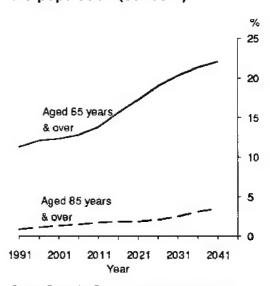
In 1993 South Australia had the highest aged dependency ratio (0.20) followed by Tasmania (0.19), New South Wales and Victoria (both 0.18). In 2041 aged dependency ratios are expected to be highest in Tasmania (0.43), South Australia (0.42), and Victoria (0.40) (see *Population — State summary table* p. 3).

#### The aged population

The aged population is expected (under series A assumptions) to grow from 2.1 million in 1993 to 5.5 million in 2041, increasing as a proportion of the total population from 12% in 1993 to 22% in 2041. The largest increases (of about 98,000 a year) are projected to occur during 2011-31 as survivors of the 'baby boom' generation

Figure 2

Projected aged as a proportion of the population (series A)



Source: Population Projections, 1993-2041: Series A; Estimated Resident Population

Table 2

Age distribution of the projected population (series A), 2041

Age group (years)	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Under 15	17.6	16.8	17.6	15.5	17.7	15.4	21.6	17.5	17.3
15-64	60.3	59.9	61.4	59.5	61.5	58.7	64.5	63.9	60.6
65 and over	22.2	23.3	21.0	25.0	20.8	25.0	13.9	18.6	22.0
Total	100.0	100.0	100.0	100.0	1 <b>0</b> 0.0	100.0	100.0	100.0	100.0
85 and over	3.6	3.8	3.1	4.2	3.3	4.1	1.5	3.0	3.5
	'000	,000	'000	,000	.000	1000	,000	.000	'000
Total	7 941.4	5 282.2	5 853.8	1 622.3	2 786.2	537.7	294.9	540.0	24 858.4

Source: Population Projections, 1993-2041; Series A

(born in the late 1940s to 1960s) reach retirement age.

The number of persons aged 85 years and over is projected to increase by an average of 10,000 a year until 2026 (except during 2016-21 when the very low birth rates of the 1930s depression are echoed in this cohort), and then by an average of 26,000 a year during 2026-41.

Women have a longer life expectancy than men (see *Health – national summary table* p. 52) and therefore outnumber men in the older age groups. In 1993 there were 76 men for every 100 women aged 65 years and over. By 2041 the aged sex ratio is expected to be 79, reflecting a prospective reduction in the gap between male and female life expectancy. For persons aged 85 years and over the sex ratio is projected to increase from 42 in 1993 to 50 in 2041. In 2041 women are expected

to be 56% of the aged population and 67% of persons aged 85 years and over. South Australia has the oldest age structure of all States and Territories, a situation expected to remain unchanged well into the next century. By 2041, the aged are projected to represent 25% of the State's population, and children 15%. The aged are also projected to represent 25% of Tasmanians, and children 16%. In both States persons age 85 years and over are projected to account for over 4% of the population compared to the national average of 3.5%. Victoria's population is also expected to have a relatively old age profile in 2041 while New South Wales will remain

#### Endnotes

1 Household Expenditure Survey, Australia: the Effects of Government Benefits and Taxes on Household Income (6537.0).

close to the national average.

## For more information

- Projections of the Populations of Australia, States and Territories, 1993-2041 (3222.0)
- Detailed inquiries: Assistant Director, Population Estimates and Projections (06) 252 7132
- General inquiries: see p. 209



# **Family**

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Between 1976 and 1991 the proportions of people living alone and of lone parents with dependent children each increased by 4%. The proportion of couples with dependent children decreased but they remain the predominant family type.	
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Although young adults are more likely to live apart from their parents than with them, they are staying longer in the parental home before moving out. The change has been greater for women than for men and is linked to increased participation in tertiary education.	
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# Family — national summary

LIVING ARRANGEMENTS	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Persons who live alone (of persons aged 15 years and over)	%	n.a.	7.6	7.9	8.2	8.2	8.3	8.5	8,4	8,2	8,6	8.9
Average family size (persons)	no.	n.a.	n.a.	n.a.	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2
Couple families with dependants (of all families)	%	46.6	47.6	47.2	46.7	45.8	45.5	45.7	44.7	44.3	43,7	43.4
One parent families with dependants (of all families)	%	7.7	7.5	7.9	7.8	7.8	8.4	8.1	7.6	8.1	8.5	9.0
Couple only families (of all families)	%	29.6	29.4	28.9	29.6	30.2	30.4	30.7	31.5	31.2	31.3	31.1
De facto couples (of all couples)	%	n.a.	n,a,	n.a.	n.a.	5.7	n.a.	п.а.	n.a.	п.а.	8.2	n.a
Employed ione parents with dependants (of all ione parents with dependants)	%	40.9	36.4	38.5	40.0	42.5	42.1	43.9	50.2	49.0	47.0	45.7
Couples with dependants, both employed (of all couples with dependants)	%	42.0	40.3	42.4	45.5	48.5	50.2	50.9	53.8	55.9	53.4	53.3
FAMILY FORMATION	Unita	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Marriage rate (per 1,000 not married males)	no.	55.0	52.4	50.7	48.8	46.0	45.7	45.3	44.2	43.0	40.9	41.1
Median age of males at first marriage	years	24.6	24.9	25.1	25.4	25.6	25.9	26.1	26.3	26.4	26.7	26.9
Median age of females at first marriage	years	22.4	22.7	22.9	23.2	23.5	23.8	24.0	24.2	24.3	24.5	24.7
Divorce rate (per 1,000 married males)	no.	12.5	12.2	12.0	10.9	10.7	10.6	10.8	10,8	10.9	11.6	11.5
Median duration of marriage to separation	years	7.6	7.7	7.8	7.7	7.6	7.3	7.3	7.3	7.3	7.4	7.4
Divorces involving children (of all divorces)	%	61.6	61.6	61.0	60.6	59.7	58.6	57.6	55.4	55.7	54.2	52.9
Total fertility rate (per woman)	no.	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9
Median age of mothers at nuptial first confinement	years	25.5	25.7	26.0	26.3	26.5	26.8	27.1	27.3	27.6	27.8	28.0
Births to mothers under 20 years (of all births)	%	7.2	6.9	6.3	5.9	5.9	5.7	5.6	5.7	<b>5</b> .7	<b>5</b> .7	5.4
Births outside marriage (of all births)	%	13.7	14.7	14.8	15.5	16.8	18.0	19.0	20.2	21.9	23.0	24.0
Births outside marriage	%	n.a.	n.a.	n.a.	68.2	70.6	73.0	74.4	75.9	77.1	79.5	81.0

# Family — State summary

LIVING ARRANGEMENTS	Units	Years	NSW	Vic.	CHd	SA	WA	Tas.	NT	ACT	Aust.
Persons who live alone (of persons aged 15 years and over)	%	1993	10.3	9.7	10.0	11.6	9.9	10.5	9.2	8.5	10.2
Average family size (persons)	no.	1993	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.2
Couple families with dependants (of all families)	%	1993	43.3	43.8	42.7	39.7	42.0	40.6	51.9	46.5	42.9
One parent families with dependants (of all families)	%	1993	9.3	8.4	8.1	9.3	10.0	8.8	9.6	12.1	9.0
Couple only families (of all families)	%	1993	40.3	41.3	43.0	45.5	43.1	44.4	32.4	36.9	41.8
De facto couples (of all couples)	%	1991	7.9	6.7	9.7	7.9	9.6	8.3	18.5	9.2	8.2
Employed ione parents with dependants (of all lone parents with dependants)	%	1993	44.7	43.9	44.2	44.4	49.3	38.4	60.7	62.9	45.3
Couples with dependants, both employed (of all couples with dependants)	%	1993	52.1	51.9	52.7	54.4	50.4	52.8	63.1	61.9	52.5
FAMILY FORMATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
		<u> </u>						4.		44.0	40.0
Marriage rate (per 1,000 not married males)	no.	1991	44.2	44.0	43.4	44.7	44.1	47.4	27.8	41.8	40.9
Median age of males at first marriage	years	1992	27.0	27.0	26.4	26.5	27.0	26.5	28.1	26.7	26.9
Median age of females at first marriage	years	1992	24.8	25.0	24.2	24.4	24.7	24.2	25.4	24.9	24.7
Divorce rate (per 1,000 married males)	no.	1991	10.1	11.5	13.2	12.8	12.4	13.3	11.2	33.1	11.6
Median duration of marriage to separation	years	1992	6.6	7.5	7.9	7.9	7.8	7.9	6.8	8.4	7.4
Divorces involving children (of all divorces)	%	1992	47.2	53.3	57.6	51.9	56.1	60.6	55.4	59.5	52.9
Total fertility rate (per woman)	no.	1992	1.9	1.8	1.9	1.7	1.9	1.9	2.4	1.7	1.9
Median age of mothers at nuptial first confinement	years	1992	27.9	28.3	27.7	28.5	27.8	27.6	28.0	28.2	28.0
Births to mothers under 20 years (of all births)	%	1992	5.3	3.7	6.8	4.9	6.1	7.1	15.1	4.1	5.4
Births outside marriage (of all births)	%	1992	23.1	19.1	27.9	25.0	26.6	28.4	55.3	20.4	24.0
Births outside marriage acknowledged by father (of all births outside marriage)	%	1992	81.7	82.4	80.3	82.3	80.1	83.7	66.0	85.5	81.0

### Family — definitions and references

- Average family size the total number of family members divided by the number of families. Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Birth the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any other evidence of life such as heart-beat.

Reference: Births, Australia (3301.0)

Births outside marriage — births (as defined) where the father was not married to the mother at the time of the birth, whether or not the parents were living together at the time of the birth, and whether or not the child may subsequently have been legitimated or adopted.

Reference: Births, Australia (3301.0)

- Births outside marriage acknowledged by father—births outside marriage (as defined) where the father's name is recorded on the birth certificate. Reference: Births, Australia (3301.0)
- Couple family a family (as defined) consisting of a male and a female partner who are married or in a de facto relationship. It may include one or more dependent children (as defined) and/or other family members.

Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)

- Couple only family a couple family (as defined) with no dependent children (as defined) or other family members (e.g. adult children) present. Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Couple family with dependants a couple family (as defined) with at least one dependent child (as defined) present.

Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)

- De facto couple a couple who identified themselves as de facto partners in a relationship question.

  Reference: Census of Population and Housing (2722.0)
- Dependants (dependent children) all family members under 15 years of age and family members aged 15-24 years attending an educational institution full-time, except those classified as husbands, wives, lone parents or other family heads.

  Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- **Divorce rate** the number of divorces granted per 1,000 married male or female population. Reference: Divorces, Australia (3307.0)
- Divorces involving children divorces of couples with unmarried children of the marriage who were under 18 years of age at the time of application for divorce. Under the *Family Law Act 1975*, adopted and ex-nuptial children and children from a former marriage may be included (in certain cases). Children who are married or aged 18 years or more are not subject to custody and guardianship orders and are excluded.

Reference: Divorces, Australia (3307.0)

Employed — persons aged 15 years and over who either worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

Reference: The Labour Force, Australia (6203.0)

Family — two or more people related by blood, marriage, adoption, or a de facto relationship who live in the same household. Three major family types are identified: couple families, one parent families and families of related adults. Non-family members such as friends or boarders are excluded from the data on families.

Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)

- **Lone parent** the head of a one parent family. Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Marriage rate the number of marriages per 1,000 not married male or female population aged 15 years and over.

Reference: Marriages, Australia (3306.0)

**Median** — the value at which half the population falls above, and half falls below.

Median age at first marriage

Reference: Marriages, Australia (3306.0)

- Median age of mothers at nuptial first confinement the median age of mothers at the birth of the first child of their current registered marriage.

  Confinements (the number of pregnancies resulting in at least one live birth) rather than births are used in this indicator to ensure that mothers who have multiple births are counted only once.

  Reference: Births, Australia (3301.0)
- Median duration of marriage to separation the median interval between the date of marriage and the date of separation.

  Reference: Divorces, Australia (3307.0)
- One parent family with dependants a parent together with at least one dependent child (as defined) of his/her own.

Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)

- Persons who live alone persons who are the only member of a household. Reference: Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Total fertility rate the average number of children a woman would bear during her lifetime if she conformed to the current age-specific fertility rates. Reference: Births, Australia (3301.0)

### Changes in living arrangements

#### LIVING ARRANGEMENTS

Between 1976 and
1991 the proportions
of people living
alone and of lone
parents with
dependent children
each increased by
4%. The proportion
of couples with
dependent children
decreased.

Changes in living arrangements and family characteristics over the last two decades are the outcome of various demographic and social trends. Couples are marrying later, increasingly after a period of living together; women are having fewer children, later in life; the proportion of one parent families, most of which are headed by a woman, has increased; and the ageing of the population, coupled with the longer life expectancy of women over men, has resulted in an increase in the proportion of one person households.

Associated with these changes has been a decline in average household size. The number of households increased by 35% between 1976 and 1991 while the population increased by 24%.

#### One person households

The proportion of one person households has increased in the last 15 years from 16% in 1976 to 20% in 1991. Lower marriage rates and increased divorce rates have contributed to this increase, but the most important factor is the ageing of the population. In 1991, 39% of persons living alone were aged 65 years or more and 74% of them were women. The greater proportion of women living alone at older ages reflects the longer life expectancy of women, 80.4 years compared to 74.5 years for men in 1992 (see Health — national summary table p. 52).

The growth in one person households is expected to continue with the continued ageing of the population. In 1991 there were

#### Data sources and classification

ABS family and household data are available from a number of different sources. While the Labour Force Survey provides a consistent annual time series for the 1980s and 1990s, the Census of Population and Housing provides a more detailed classification of different family types. Extensive changes were made to the classification in 1991 to reflect the contemporary composition of families. These changes have, however, impaired comparability with previous censuses. Time series comparisons are only possible back to 1976 and then only for broad aggregates. The 1992 Survey of Families in Australia provides a wide range of data, not available from other collections, about the characteristics of families and family members, and the nature of family support.

In all three sources, people are classified to different types of households and families on the basis of their usual living arrangements and their relationships to other household members. Households comprise persons living alone or two or more people who share a dwelling. Families consist of two or more related people within a household. A household composed of one person or of unrelated people is termed a non-family household. A family household may contain more than one family.

1.9 million people aged 65 years and over. By 2041 it is projected that the population in this age group will have almost trebled to 5.5 million (see *Projections of the aged population* p. 27).

#### **Group households**

Group households accounted for 5% of all households in 1991. The age structure of

Table 1
Household type(a)

Household type	1976	1981	1986	1991
	%	%	%	%
One person	15.7	18.0	18.5	19.8
Group	(9)	(b)	4.1	4.5
Family	84.3(b)	82.0(b)	77.3	75.7
	'000	,000	'000	'000
Total households	4 140.5	4 668.9	5 187.4	5 586.7

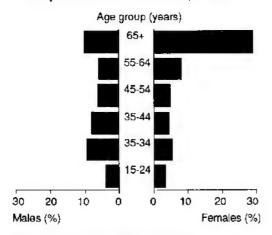
<sup>(</sup>a) Excludes caravans etc. In carvan parks.

Source: Census of Population and Housing

<sup>(</sup>b) Group households and family households were not separately identified in 1976 and 1981.

Figure 1

One person households, 1991



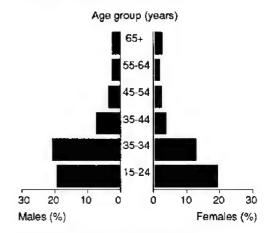
Source: Census of Population and Housing

people living in group households was much younger than that of one person households. In 1991, 72% of people in group households were aged 15-34 years and 5% were aged 65 years or more. In reflection of their young age profile, the proportion of people in group households who had never married was 75% in 1991. 56% of people in group households were male and 74% of group households contained only two persons.

Many factors are related to the formation and dissolution of group households. For many young adults, sharing a group house represents a period of transition between living with parents and the formation of a partnership. The move away from the parental home may be associated with a desire for greater independence or may be necessary to be near a place of employment

Figure 2

Group households, 1991



Source: Census of Population and Housing

or education. In 1991, 13% of people living in group households were full-time students.

#### Family households

In the 1991 Census, 4.3 million family households were identified, 99% of which contained only one family. Family households represented 76% of all households. While most families in 1991 were couple families, the proportion of these families had decreased slightly since 1976 (from 88% to 85%) with a compensating increase (from 6% to 9%) observed in the proportion of one parent families with dependent children. The proportion of families consisting of a couple only increased from 28% in 1976 to 31% in 1991, reflecting both the decisions of younger couples not to have children, or to delay child

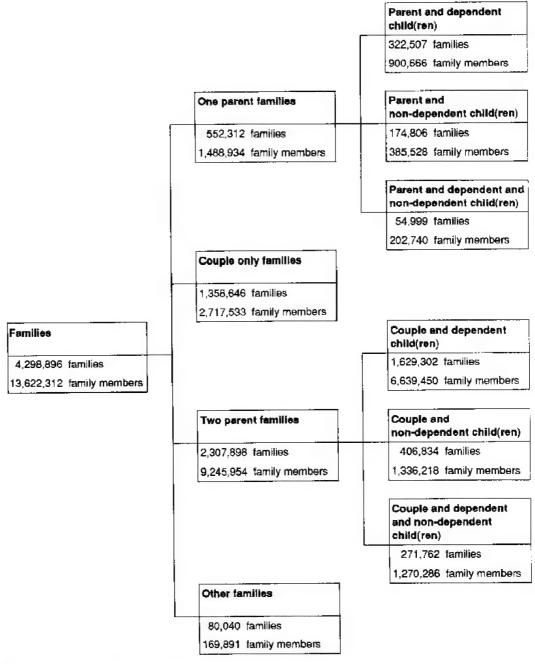
Table 2 Family type<sub>(a)</sub>

Family type	1976	1981	1986	1991
	%	%	%	%
One parent with dependants	6.5	8.6	7.8	8.8
Couple only	28.0	28.7	30.3	31.4
Couple with dependants	48.4	46.6	44.8	44.4
Couple with non-dependants only	11.1	10.0	10.9	9.5
Related adults	5.9	6.0	6.2	5.9
	'000	'000	'000	0000
Total families	3 408.9	3 699.3	4 111.4	4 272.

(a) Excludes caravan park dwellers.

Source: Census of Population and Housing

Figure 3
Classification of family type, 1991



Source: Census of Population and Housing

bearing, and increased life expectancies resulting in couples spending longer together after their children have left home.

#### **Couple families**

Of the 3.7 million couple families in 1991, 44% had dependent children only, 7% had both dependent and non-dependent children,

11% had non-dependent children only and the remaining 37% had no children (at home). The family reference person was older in couple only families than in other couple families. In 55% of couple only families, the family reference person was over 55 years of age, compared to 5% of couples with dependent children and 52% of couples with non-dependent children only.

#### De facto couples

The proportion of couples in de facto relationships remains low but is increasing. The 1982 Families Survey found that 5% of couples were de facto. In the 1992 Survey of Families in Australia this figure had risen to 8%. Partners in de facto relationships are likely to be younger than partners in registered marriages. In 1992, 69% of people in de facto couples were aged 15-34 years compared to 38% in registered married couples. De facto couples were also less likely to have dependent children than registered married couples. In 1992, 51% of registered married couples had dependent children compared to 36% of de facto couples.

Reflecting their younger age profile, a high proportion of people living in de facto relationships had never been married. In 1992, 65% of people in defacto relationships had never been married and 26% had been divorced.

The incidence of de facto relationships as a form of trial marriage is also increasing. In 1975, 16% of all couples who married had lived together before marriage. Of couples who married in 1992, 56% had cohabited before their marriage.

#### One parent families

One parent families in the 1991 Census represented 13% of all families identified. 58% of one parent families contained dependent children only, 32% contained non-dependent children only and the

Figure 4
Marriages preceded by cohabitation



Source: Survey of Families in Australia

remaining 10% had both dependent and non-dependent children present.

The number (and proportion) of one parent families with dependent children has been rising over the past 15 years. In 1991 there were 377,500 one parent families with dependants in Australia, (322,500 with dependants only and 55,000 with dependants and non-dependants) making up 9% of all families, an increase from 6% in 1976. For the first time, the 1991 Census identified as one parent families those which consisted of a parent and non-dependent child(ren) only. There were 175,000 such families, 4% of all families. The majority (87%) of lone parents were women.

There are many reasons for the increase in one parent families including the introduction of the Family Law Act 1975 which enabled no-fault divorce to be granted on the grounds of mutual consent. Other reasons include greater financial security for women through increased opportunity for labour force participation, particularly through increases in part-time and casual employment, the introduction of the sole parent's pension, and a change in society's attitudes towards the family.

#### Blended families

The chance of living with both parents decreases as a child gets older. As couples separate and move into new relationships, the likelihood of a child living in a blended family increases. In 1991, 25% of families with dependent children included children who were not living with both natural parents, compared to 20% in 1986. These figures include one parent families (16% in 1991 and 14% in 1986). Overall, 3% of

#### **Blended families**

In this review a blended family is defined as a couple family with two or more children of whom at least one is the natural child of both parents and at least one is the step child of at least one parent. A child is defined as aged 0-14 years or aged 15-24 years and a full-time student.

A natural child is the biological or adopted child of a couple or lone parent. A step child is the natural child of one, but not both, married or de facto partners, or the natural child of a former partner. An other child is a child without natural, adopted or step parents of their own living in the same household. The child may or may not be related to the parent(s).

Table 3

Natural and step children in families(a)

	1986				1991							
	One	Two parent		All	One	Two pare	ent	All				
Mix of children	parent	Married	De facto	familles	parent	Married	De facto	families				
	%	%	%	%	%	%	%	%				
Natural children only	95.1	94.1	51.3	92.6	89.7	91.4	56.0	89.2				
Step children only	1.3	2.8	36.2	3.9	0.2	3.1	28.9	4.0				
Natural & step children only	0.3	2.1	10.8	2.2	0.1	3.0	10.7	3.0				
Other(b)	3.3	1.0	1.8	1.3	10.0	2.5	4.3	3.8				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				
	'000	'0000	'000	'000	'000	'000	.000	'000				
Total	279.5	1 688.8	76.2	2 044.4	359.0	1 745.9	121.0	2 225.9				

(a) Comprises only primary families with dependent children.

(b) Comprises other children, including loster children, and combinations of natural, step and other children.

Source: Census of Population and Housing

### For more information

- 1991 Census —
   Community Profiles,
   Australia (2722.0)
- Detailed inquiries: Assistant Director, Family Survey (06) 252 7030
- General inquiries:
   see p. 209

families with dependent children in 1991 were blended families, 4% were step families, and 4% contained other children.

Of couples with dependent children, registered married couples were considerably more likely than de facto couples to have only natural children. However, between 1986 and 1991 there was an increase in the proportion of de facto couples with natural children only, from 51% to 56%. At the same time the

proportion of ex-nuptial births with paternity acknowledged rose from 71% to 80% (see Family — national summary table p. 32). This indicates an increase in the proportion of de facto couples who are choosing to start a family. People may also choose to live in de facto relationships after separation or divorce. This is reflected in the 29% of de facto couples with step children only, and the further 11% with both step children and natural children in 1991.

# Lone fathers with dependent children

#### LIVING ARRANGEMENTS

In 1993, 12% of lone parents with dependent children were men. Until relatively recently, lone fathers were an almost invisible minority (less than 1%) of parents. It was not until 1978, with the introduction of the Supporting Parents' Benefit, that government financial assistance was made available for lone fathers on the same basis as it was available for lone mothers. Assistance for lone mothers had first been introduced in 1942 as the Widows' (Class A) Pension. This covered widows who were maintaining at least one child under 16 years of age. However, the definition of widows was very broad and included de facto widows, deserted wives and divorced women who had not remarried. Subsequent amendments, most notably in 1974 when the Supporting Mothers' Benefit was introduced, extended the coverage to include deserted de facto wives, unmarried mothers and other lone mothers who had not previously been eligible for a Widows' (Class A) Pension<sup>1</sup>.

### One parent families with dependent children

Families in which there is a family head together with at least one dependent son or daughter of his/her own. Some of these families may also contain non-dependent children or other related adults.

Dependent children are defined as being:

- family members under 15 years of age;
- family members aged 15-19 years and attending school;
- family members aged 15-24 years attending a tertiary education institution full-time, except those classified as husbands, wives, ione parents or other family heads.

Table 1

Parents with dependants

	1986		1993		1993	
Age group (years)	Lone fathers	Married fathers	Lone tathers	Married fathers	Lone mothers	Married mothers
	%	%	%	%	%	%
Parent						
15-24	• •	2.5	3.5	2.1	12.1	4.8
25-34	23.3	31.6	14.9	27.4	35.2	35.8
35-44	40.8	42.3	43.3	42.9	37.0	43.2
45-54	25.2	18.3	30.4	23.0	14.0	14.7
55 and over		5.2	7.9	4.6	1.7	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Youngest dependant						
0-4	13.6	42.3	12.5	42.2	34.4	42.2
5-9	19.3	23.1	20.9	22.6	27.1	22.6
10-14	37.2	22.9	38.3	20.2	22.9	20.2
15-24	29.8	11.7	28.2	15.0	15.5	15.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
	'000	'000'	'000	'000	'000	'0000
Total	40.3	1 901.1	48.3	2 035.2	369.3	1 971.9

Source: Labour Force Survey

In 1993, there were 418,000 lone parents with dependent children, 17% of all parents with dependants. 48,000 (12%) of these lone parents were lone fathers. The number of lone fathers increased by 20% (8,000) between 1986 and 1993, compared to increases of 7% in the number of partnered fathers and 32% in the number of lone mothers<sup>2</sup>.

#### **Family profile**

In general, lone fathers are older than partnered fathers and have older dependent children. The median age of lone fathers in 1993 was 42 years compared to a median age of 39 years for partnered fathers. Lone fathers were also generally older than lone mothers. The median age of lone mothers was 35 years.

The proportion of lone fathers in older age groups is increasing. In 1986, 25% of lone fathers were aged 45-54 years; by 1993 this had risen to 30%. In contrast, the proportion of lone fathers aged 25-34 years decreased over the same period, from 23% in 1986 to 15% in 1993. The age structure of partnered fathers showed a similar trend. Between 1986 and 1993, the proportion aged 45-54 years increased from 18% to 23%, and the proportion aged 25-34 years decreased from 32% to 27%.

In 1993, about one-third of lone fathers had responsibility for a child aged less than 10 years compared to nearly two-thirds of other parents. On the other hand, lone fathers were almost twice as likely as other parents to have only 15-24 year old dependants living at home, 28% compared to 15%.

The proportions of lone fathers and lone mothers who were separated or divorced were similar in 1991 (66% and 63% respectively)<sup>3</sup>. However, lone fathers were more likely than lone mothers to have been widowed (12% compared to 8%), while lone mothers were more likely to have never been married (23% compared to 10%).

#### Labour force status

Lone fathers have a lower labour force participation rate than partnered fathers (77% compared to 94% in 1993), and a higher unemployment rate (16% compared to 8%). Of fathers who were employed, lone fathers were almost three times as likely as partnered fathers to work part-time (11% compared to 4%).

In comparison with lone mothers, lone fathers had a higher labour force participation rate and a slightly lower unemployment rate. If employed, however, lone mothers were four times as likely as lone fathers to work part-time.

In 1990, a smaller proportion of lone fathers were dependent on government pensions and benefits as their main source of income than of lone mothers (44% compared to 64%), largely reflecting their greater labour force participation<sup>4</sup>. Consequently, lone fathers had higher median weekly incomes than lone mothers, \$346 compared to \$273.

Table 2

Labour force participation of parents with dependants, 1993

Labour force participation	Lone fathers	Merried fathers	Lone mothers	Married mothers
	'000	,000	,000	'000'
Employed full-time	28.1	1 679.5	84.6	474.0
Employed part-time	3.5	73.3	73.1	621.4
Unemployed	5.9	154.3	33.7	88.0
Not in the labour force	10.9	128.2	177.9	788.5
Total	48.3	2 035.0	369.0	1 972.0
	%	%	%	%
Labour force participation rate	77.5	93.7	51.8	60.0
Unemployment rate	15.8	8.1	17.6	7.4

Source: Labour Force Survey

Table 3

Nature of occupancy of families with dependants, 1991

	One parent	families		
Nature of occupancy	Melo	Female	Total	Two parent families
	%	%	%	%
Owner	25.8	18.4	19.4	32.4
Purchaser	33.3	24.4	25.6	46.7
Government renter	12.6	26.0	24.2	6.0
Other renter	28.4	31.2	30.9	15.0
Total	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

#### Housing

Lone parents are more likely to rent their accommodation than partnered parents. In 1991, 55% of one parent families were renting a home compared to 21% of two parent families. Lone fathers were less likely than lone mothers to have been renting (41% compared to 57%) with most of the difference being in the proportion who were renting public accommodation.

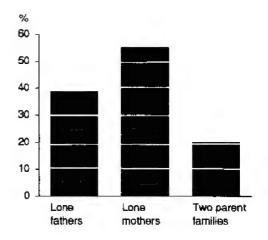
One parent families usually have fewer earners and hence lower incomes than couple families. As a consequence, one parent families generally spend a greater proportion of their income on housing (22% in 1990) than two parent families (14%). Reflecting their higher incomes, lone fathers spent a slightly smaller proportion of their incomes on housing than lone mothers in 1990.

For more Information

- Labour Force Status and Other Characteristics of Families, Australia (6224.0)
- Detailed inquiries;
   Assistant Director,
   Labour Force
   Supplementary
   Surveys
   (06) 252 6504
- General inquiries: see p. 209

Figure 1

# Proportion of gross weekly income spent on housing by families with dependants, 1990



Source: Survey of Income & Housing Costs and Amenities

#### **Endnotes**

- 1 Kewley, T.H. (1980) Australian Social Security Today: major developments from 1900 to 1978 Sydney University Press.
- 2 Unless otherwise stated statistics presented in this review are drawn from the Labour Force Survey.
- 3 Census of Population and Housing.
- 4 Survey of Income & Housing Costs and Amenities.

### Living with parents

#### LIVING ARRANGEMENTS

Although young adults are more likely to live apart from their parents than with them, they are staying longer in the parental home before moving out.

Young adults are leaving home at later ages. Between 1981 and 1991, the number of people aged 20-34 years living with their parents increased by 35%, from 580,000 to 790,000. These figures represented 16% and 19% respectively of all people aged 20-34 years. The proportion of 20-24 year olds living with their parents increased from 34% to 40% and the proportion of 25-29 year olds increased from 9% to 13%. These increases were greater for women than for men.

As a consequence of marrying at younger ages, women tend to leave home earlier than men. In 1991, 66% of women aged 20-24 years were not living with their parents compared to 54% of men.

#### Students

43% of full-time students aged 20-34 years lived with their parents in 1991 compared to 25% of part-time students and 17% of those not studying. Regardless of age, full-time students were more likely to live with their parents than other people. About half of young students (aged 20-24 years) lived with their parents compared to just over one-third of young people who were not studying. Higher education students were slightly more likely to live with their parents than TAFE students (36% compared to 31%) but this difference is mainly related to their different age structures; even among 20-34 year old students, TAFE students have an older age profile.

The number of full-time students aged 20-34 years more than doubled between 1981 and 1991 and, since students are more likely to live with their parents than non-students, this

Table 1
Proportion of people living with parents

	Age gi	roup (ye	ers)		
	20-24	25-29	30-34	Total	
	%	%	%	%	'000
Men					
1981	42.5	13.1	5.3	20.7	376.9
1991	46.0	17.1	7.3	23.4	475.0
Women					
1981	25.6	5.7	2.3	11.4	205.4
1991	33.9	9.1	3.4	15.2	310.5
Total					
1981	34.1	9.4	3.8	16.1	582.4
1991	40.0	13.1	5.3	19.3	785.5
	'000	.000	'000	'000	
Total					
1981	425.8	111.0	45.6	582.4	
1991	537.1	174.9	73.6	785.5	

Source: Census of Population and Housing

increase has played a major role in increasing the overall proportion of young people living with their parents.

#### **Marital Status**

As is to be expected, people aged 20-34 years who have never been married were the most likely to live with their parents (38% in 1991), while those who were currently married were least likely to (less than 1% in 1991). People whose marriages had ended

Table 2

Proportion of people living with parents by student status, 1991

	Age group	(years)			
Student status	20-24	25-29	30-34	Total	
	%	%	%	%	'000
Full-time	55.1	16.6	6.7	43.3	113.2
Part-time	49.0	14.5	4.9	24.9	82.2
Not studying	36.8	13.0	5.4	17.2	579.9
Total	40.0	13.1	5.3	19.3	785.5

Source: Census of Population and Housing

Table 3

Proportion of people living with parents by marital status, 1991

	Age gi			
Marital status	20-24	25-29	30-34	Total
	%	%	%	%
Never married	48.6	27.7	19.8	37.9
Married	2.9	0.7	0.3	0.8
Separated	17.4	10.1	6.1	9.0
Divorced	19.7	10.7	6.8	8.9
Widowed	12.6	5.8	3.3	6.4
Total	40.0	13.1	5.3	19.3

Source: Census of Population and Housing

through separation or divorce were more likely to live with their parents than those who had been widowed.

#### Income

In general, young adults with greater incomes were less likely to live with their parents than those with lower incomes. However, the relationship between income and living at home is influenced by the various government pensions and benefits. For example, in 1991, the maximum living-at-home allowance for Austudy was

\$4,609 a year<sup>1</sup> which explains the high proportion of 20-24 year olds with annual income of \$3,001-\$5,000 living at home.

To qualify for the independent or away-from-home Austudy allowance (maximum of \$7,003 in 1991), students must be living apart from their parents. Thus the proportion of 20-24 year olds who were living with their parents falls for those receiving \$5,001-\$8,000.

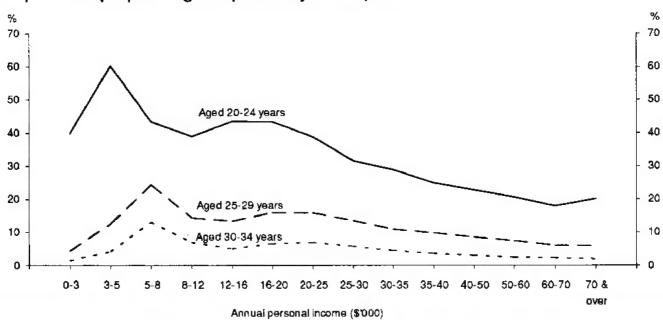
Many people aged 25-34 years with low incomes are married women with young children whose only personal income is the family allowance. Only a small proportion are likely to be living with their parents. Among 25-34 year olds, the peak at \$5,000-\$8,000 annual income corresponds to the income level for single rate social security benefits.

#### Birthplace of mother

Young people with Southern European backgrounds, especially Greece, Italy and Yugoslavia, had a greater tendency to live with their parents than those from other backgrounds. While 40% of all 20-24 year olds lived with their parents in 1991, 66% of 20-24 year olds whose mother had been born in Southern Europe lived with their parents. The relative proportions were also high in older age groups; 28% of 25-29 year olds and

Figure 1

Proportion of people living with parents by income, 1991



Source: Census of Population and Housing

Table 4
Proportion of people living with parents by birthplace of mother, 1991

Birthplace of	Age g	91 <b>8</b> )		
mother	20-24	25-29	30-34	Total
	%	%	%	%
Greece	72.8	35.1	13.2	45.8
Italy	67.5	28.6	11.6	36.0
Yugoslavia	61.2	23.6	8.5	32.7
Viet Nam	54.1	19.3	6.7	25.8
Lebanon	48.4	19.2	7.2	25.5
Australia	38.8	12.7	5.5	19.1
Germany	39.7	11.5	4.4	19.0
Netherlands	34.8	9.5	3.4	15.5
United Kingdom	34.5	9.7	3.9	15.3
China	40.7	9.3	3.7	14.4
Ireland	30.5	7.2	2.9	11.4
New Zealand	20.6	4.0	1.3	8.0
Other	35.1	10.6	3.8	16.0
Total	40.0	13.1	5.3	19.3

Source: Census of Population and Housing

11% of 30-34 year olds with Southern European backgrounds lived with their parents, compared to less than half these proportions in the total population.

Only 21% of 20-24 year olds with New Zealand born mothers lived with their parents but the proportion is probably considerably higher in New Zealand since many young New Zealanders move to Australia independently of their parents.

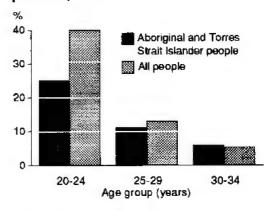
#### Aboriginal and Torres Strait Islander people

Young Aboriginal and Torres Strait Islander people were generally less likely to live with their parents than other Australians. In 1991, 25% of indigenous people aged 20-24 years lived with their parents, compared to 40% of all 20-24 year olds, partly reflecting the earlier age at which Aboriginal people marry.

The difference between the proportions of Aboriginal and non-Aboriginal people living with their parents reduced with age, and the proportion of 30-34 year olds living with their parents was higher among indigenous than non-indigenous people. This reflects the greater role of the extended family in the Aboriginal community. Aboriginal families

Figure 2

## Proportion of people living with parents, 1991



Source: Census of Population and Housing

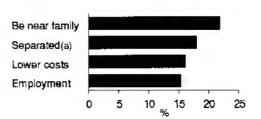
accounted for 9% of extended families in Australia, but only 2% of families overall.

#### Returning home

The 1992 Survey of Families in Australia collected information for all household members on changes of address in the past five years. Where a person and their parents had both moved to the same address within the same year they have been excluded from the following analysis.

In 1992, 7% of 20-34 year olds who were living with their parents had previously lived away from home and had moved back within the previous five years. Older people living with their parents were more likely to have lived away than younger people. 6% of 20-24 year olds living with parents had lived away from home at some time in the previous five years, compared to 9% of 25-29 year olds, and 10% of 30-34 year olds.

Figure 3
Reasons for 20-34 year olds
moving to live with parents, 1992



 (a) Comprises separation or divorce from registered marriages and separations from de facto marriages.

Source: Survey of Families in Australia

Of those children who returned to live with their parents, 22% did so to be with their families and 18% because of the break down of a marital relationship. The proportion of men returning to be with their families was similar to the proportion of women. Women were more likely than men to return to live with their parents following separation or divorce.

#### Dependency

There are no available data which indicate the extent of a person's dependence upon their parents, or vice versa. Indeed, where an adult child lives with parents it may be a matter of speculation as to who is dependent on whom. However, the age of the adult child, whether they pay rent or board to their parents and their employment/student status give some indications of dependency status.

Overall, 45% of 20-24 year olds and 33% of 25-34 year olds who lived with their parents in 1992 paid no board. As is to be expected those employed were more likely to pay board than those who were unemployed, and part-time students were more likely to pay board than full-time students. Among 20-24 year olds, women were less likely than men to pay board, while the opposite was the case for 25-34 year olds.

Table 5 Proportion of people living with their parents who paid no board, 1992

Selected	Age grou	ip (years)
characteristics	20-24	25-34
	%	%
Male	42.1	34.8
Female	48.1	28.3
Employed	41.0	31.6
Unemployed	48.4	35.1
Full-time students	85.7	43.6*
Part-time students	43.9	36.8
Income over \$25,000	34.2	29.5
Total	44.6	32.5

Source: Survey of Families in Australia

#### For more information

- Australia's Families - Selected Findings from the Survey of Families in Australia (4418.0)
- Detailed inquiries: Assistant Director, Family Survey (06) 252 7030
- General inquiries: see p. 209

#### **Endnotes**

1 Department of Employment, Education and Training (1993) Report on the Operation of the Student Assistance Act 1992.

### Child care

#### FAMILY SERVICES

While the use of formal child care arrangements has increased steadily since 1984, most non-parental care continues to be provided by other family members.

The past two decades have seen increased use of, and public interest in, child care, and a corresponding increase in political involvement in this issue. During this period child care has emerged as a focus of public debate and government policy.

The number of government funded child care places increased from nearly 59,000 in 1984 to 211,000 in 1993. Government spending on child care is budgeted at \$651.5 million for 1993-94.

However, despite the increased provision for, and use of, formal child care, most care of children, other than by parents, is provided on an informal basis, mainly by other family members.

#### Trends in the use of child care

Between 1984 and 1993, the proportion of children under 12 years of age receiving some kind of formal child care increased from 12% to 19%. The greatest proportional increase was among 6-11 year olds (from 2% to 6%). At the same time, the proportion of 0-2 year olds receiving formal care more than doubled (from 8% to 17%) and the proportion of 3-5 year olds receiving formal care (other than pre-school/kindergarten) almost doubled reaching 18% in 1993.

During this period use of informal child care arrangements also increased, from 30% of children under 12 years in 1984 to 42% in

#### Types of child care

The term *child care* refers to arrangements (other than parental care) made for the care of children under 12 years of age. The various types of care used can be grouped into two main categories, *formal care* and *informal care*.

- Formal care is regulated care away from the child's home and includes attendance at: a pre-school or kindergarten; a child care centre, long day care centre or family day care; a before or after school care program; other formal care arrangements such as occasional care in shopping centres etc.
- Informal care is non-regulated care either in the child's home or elsewhere. It includes care given by family members (such as the child's brothers or sisters, grandparents or other relatives), friends or neighbours, and paid baby sitters.

1990 then declined to 38% in 1993. This decline was evident for all age groups.

An important reason for using child care, both formal and informal, is to provide care for children while parents are at work, and much of the overall increase in the past decade is related to the increased participation of women in the labour force. Between 1984 and 1990 the labour force participation rate of married women increased from 43% to 53% and has remained relatively unchanged since. The slight decline in the use of child care since 1990 may be

Table 1

Trends in the use of formal and informal child care

Type of care used	1984	1987	1990	1993
	%	%	%	%
Formal care only	8.7	9.1	9.3	11.0
Informal care only	26.1	31.7	33.9	29.4
Formal and informal care	3.7	6.6	8.4	8.3
Total formal and/or informal care	38.5	47.5	51.6	48.8
Neither formal nor informal care	61.5	52.6	48.4	51.2
Total	100.0	100.0	100.0	100.0
	.000	000	.000	000
Total children	2 897.4	2 887.9	3 003.7	3 085.9

Source: National Child Care Survey

associated with the stabilisation of the labour force participation rate of married women.

#### Reasons for using child care

The use of child care is influenced both by the needs of parents (for work, leisure, shopping etc.) and by their perceptions of the benefits to the child of receiving certain types of non-parental care such as play groups, pre-school and care by grandparents.

In 1993 parental work-related reasons accounted for 43% of children receiving formal care and 46% of those receiving informal care. A further 44% of children receiving formal care (85% of those attending pre-school/kindergarten and 25% of those in long day care) did so mainly because their parents considered that it was beneficial for the child.

The proportion of children aged 3-5 years attending pre-school/kindergarten has remained relatively stable during the past decade at around 30-35% and does not appear to have been greatly influenced by work-related considerations. In 1993, 9% of children attending pre-school/kindergarten did so for parental work reasons compared to 63% in long day care, 78% in family day care and 91% in before or after school care programs.

Parents were more likely to make informal care arrangements for their children when they needed time for personal reasons such as shopping, sport, time alone, appointments etc. Such reasons accounted for 42% of children receiving informal care compared to 12% receiving formal care.

#### Type of care used

The type of child care used is largely dependent on the age of the child; younger children are much more likely to receive formal care than school age children. In 1993, 8% of 0-2 year olds and 11% of 3-5 year olds received care in long day care centres which cater for children from birth to school age. Family day care offered in private homes by registered carers was used by similar proportions (about 4%) of 0-2 year olds and 3-5 year olds, 31% of 3-5 year olds attended pre-schools/kindergartens which have fixed attendance times and generally cater for children in the year prior to starting primary school. Excluding pre-school/kindergarten, roughly equal proportions (approximately 17%) of 0-2 year olds and 3-5 year olds received formal care. 6% of 6-11 year olds received formal care, most attending before or after school care programs.

Informal care was used slightly more by younger children and was generally provided

Table 2
Reasons for using child care by type of care used, 1993

Main reason for using care

	man roa	son ioi damig					
Type of care	Work related	Personal	Beneficial for child	Other	Total children		
	%	%	%	%	%	'000	
Formal care							
Pre-school/kindergarten	9.1	4.2	85.1	1.5*	100.0	236.9	
Long day care	62.5	11.8	24.9	0.8*	100.0	146.7	
Family day care	78.1	12.9	8.0	* *	100.0	80.7	
Before/after school care	91.4	4.8*	2.3*	1.5*	100.0	85.8	
Other formal care	21.0	48.7	28.5	1.8*	100.0	79.9	
Total formal care	42.8	12.2	43.6	1.3	100.0	59 <del>6</del> .2(a)	
Informal care							
Siblings	53.1	40.0	2.3*	4.6	100.0	159.1	
Other family	43.3	49.1	4.7	8.9	100.0	707,1	
Non-family	51.2	37.8	6.2	4.8	100.0	389.1	
Total informal care	46.2	42.0	4.7	7.0	100.0	1 166.2(a)	

<sup>(</sup>a) Some children received more than one type of child care and therefore components do not add to totals.

Source: National Child Care Survey

Table 3

Type of care by age of child, 1993

Age of child (years) Type of care 0-2 3-5 6-11 % % % Formal care Pre-school/kindergarten 0.2\* 30.6 7.9 10,7 Long day care 0.2\* Family day care 44 4.2 0.9 4.8 Before/after school care 1.5 . . Other formal care 4.9 4.8 0.3 Total formal care(a) 17.0 48.1 6.1 Informal care 1.2 2.8 8.2 Siblings 30.6 26.3 Other family 177 Non-family 110 146 123 35.1 Total informal care(a) 40.3 40.7 38.6 Total using care(a) 50.3 67.5 100.0 Total children 100.0 100.0

Source: National Child Care Survey

by family members. 8% of 6-11 year olds, but very few younger children, were cared for by their brothers or sisters. 31% of 0-2 year olds, 26% of 3-5 year olds and 18% of 6-11 year olds were cared for by other family members such as grandparents, uncles, aunts etc.

#### Care by family members

The 1992 Survey of Families in Australia also found that family members, particularly grandparents, played an important role in the informal care of children under 12 years of age.

Table 4

Main providers of informal child care, 1992

Main provider of informal child care	Couple family	One parent family
	%	%
Non-resident parent	0.5*	11.7
Grandparents		
Maternal grandmother	32.0	32.4(a)
Paternal grandmother	12.1	1.8*(b)
Total grandparents	55.7	43.0
Other female relative	13.7	16.4
Total family carers	74.0	73.8
Neighbour/friend of family	21.3	22.5
Other	4.7	3.8*
Families using informal care	100.0	100.0
	.000	'000'
Families using Informal care	967.1	190.5
(a) Includes naternal grandmother	in lone fath	ner families.

<sup>(</sup>a) Includes paternal grandmother in lone father families.
(b) Includes maternal grandmother in lone father families.

In 74% of both couple and one parent families using informal care arrangements, a family member was the main provider of informal care. Overall, grandparents accounted for more than half of all the main carers. Grandmothers were the main providers of informal child care in 44% of couple families and 34% of one parent families who used informal care. Other female relatives were also an important source of child care in both family types.

In 12% of one parent families the non-resident parent (usually the father) was the main provider of informal child care.

- Child Care, Australia (4402.0)
- Australia's Families
   — Selected Findings from the Survey of Families in Australia (4418.0)
- Detailed inquiries: Assistant Director, Statistical Consultancy (02) 268 4214
- General inquiries: see p. 209

<sup>(</sup>a) Some children received more than one type of child care and therefore components do not add to totals.

Source: Survey of Families in Australia

For more information



# Health

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CAUSES OF DEATH	
Youth suicide	55
Youth suicide rates in Australia are higher than in many other countries, and are increasing. Death rates from suicide are considerably higher for young men than for young women, and for young rural men than for young urban men.	
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Although the overall proportion of young children fully immunised against the major infectious diseases has increased, the proportion of six year olds in 1989-90 who were fully immunised against whooping cough had decreased since 1983.	
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Between 1986 and 1991 the ratio of the number of general practitioners to the population decreased slightly while the specialist to population ratio increased. There is an imbalance in general practitioner numbers between urban and rural areas.	
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The proportion of the population choosing to have private health insurance has been declining. Of factors such as health status, family type, age and income which affect the choice, income is the most important consideration.	

# **Health** — national summary

HEALTH STATUS	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Male life expectancy at birth	years	71.2	72.1	72.5	72.4	72.9	73.1	73.1	73.3	73.9	74.4	74.5
Female life expectancy at birth	years	78.2	78.8	79.0	78.8	79.2	79.5	79.5	79.6	80.1	80.4	80.4
Total number of deaths	'000	114.8	110.1	109.9	118.8	115.0	117.3	119.9	124.2	120.1	119.1	123.7
Crude death rate (per 1,000 population)	no.	7.6	7.2	7.1	7.5	7.2	7.2	7.2	7.4	7.0	6.9	7.1
Standardised death rate (per 1,000 population)	no.	8.1	7.5	7,5	7.6	7.2	7.1	7.1	7.1	6.7	6.5	6.5
Infant mortality rate (per 1,000 live births)	по.	10.3	9.6	9.2	10.0	8.8	8.7	8.7	8.0	8.2	7.1	7.0
Perinatal mortality rate (per 1,000 live births)	no.	13.4	12.2	11.9	11.8	11.5	10.6	10.7	9.9	10.3	9.6	9.4
CAUSES OF DEATH	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Ischaemic heart disease death rate (per 100,000 population)	no.	213	204	199	207	200	197	191	194	183	175	180
Cancer death rate (per 100,000 population)	no.	164	166	166	175	174	174	179	179	179	181	183
Road accident death rate (per 100,000 population)	no.	22	18	17	19	19	17	19	17	15	13	12
Suicide death rate (per 100,000 population)	no.	12	11	11	12	12	14	13	12	13	14	13
AIDS related death rate (per 100,000 population)	no.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	2	3	3	4
RISK FACTORS	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alcohol: apparent consumption per person per day	ml	35.2	34.2	33.4	31.5	31.8	30.4	30.3	29.8	29.2	28.0	26.9
Tobacco: apparent consumption per person per day	grams	7.7	7.2	6.9	6.7	6.5	6.1	6.0	5.7	5.8	5.4	5.4
Total fats: apparent consumption per person per day	grams	59.7	59.2	59.0	57.5	57.4	56.4	55.8	55.3	54.3	54.2	n.a.
SERVICES	Units	1982	1983	1984	1985	1988	1987	1988	1989	1990	1991	1992
Average Medicare services processed per person	no.	n.a.	n.a.	n.a.	7.1	7.5	7.8	8.0	8.3	8.3	8.2	8.6
Acute hospital beds per 1,000 population	no.	6.2	6.1	5.9	5.8	5.7	5.4	5.3	5.2	5.0	5.0	4.5
Average length of stay in hospital	days	n.a.	6.9	6.7	6.7	6.5	6.3	6.2	5.9	5.6	5.1	4.8
Doctors per 100,000 population	no.	n.a.	n.a	n.a	n.a	210	n.a	n.a	n.a	n.a	230	n.a
EXPENDITURE	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Persons with private health insurance (of population)	%	66.8	65.4	n.a.	n.a.	53.1	n.a.	52.0	n.a.	52.0	n.a.	47.8
Total health expenditure per person per year (constant prices)	\$	n.a.	983	1 028	1 055	1 097	1 125	1 147	1 181	1 200	1 211	1 242
	1											

Reference periods:

Risk factor data, services data except doctors per 100,000 population, and expenditure data are for the year ended 30 June.

## Health — State summary

HEALTH STATUS	Units	Years	NSW	Vic.	Old	SA	WA	Tas.	NT	ACT	Aust.
Male life expectancy at birth	years	1992	74.1	74.8	74.4	75.1	75.2	74.0	68.3	76.6	74.5
Female life expectancy at birth	years	1992	80.2	80.7	80.2	80.9	80.9	79.2	72.5	81.3	80.4
Total number of deaths	'000	1992	44.8	32.0	20.5	10.9	9.9	3.7	8.0	1.1	123.7
Crude death rate (per 1,000 population)	no.	1992	7.5	7.2	6.8	7.5	6.0	8.0	4.6	3.7	7.1
Standardised death rate (per 1,000 population)	no.	1992	6.7	6.4	6.5	6.2	6.1	7.1	10.5	5.6	6.5
Infant mortality rate (per 1,000 live births)	no.	1992	7.4	5.6	7.9	6.1	7.0	6.6	15.5	6.3	7.0
Perinatal mortality rate (per 1,000 live births)	no.	1992	10.6	8.2	9.3	8.1	8.7	9.1	17.0	9.0	9.4
CAUSES OF DEATH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Ischaemic heart disease death rate (per 100,000 population)	no.	1992	195	179	180	199	142	191	53	78	180
Cancer death rate (per 100,000 population)	no.	1992	193	191	174	190	159	198	96	101	183
Road accident death rate (per 100,000 population)	no.	1992	11	10	14	12	13	14	24	9	12
Suicide death rate (per 100,000 population)	по.	1992	12	13	14	15	13	20	14	11	13
AIDS related death rate (per 100,000 population)	no.	1992	6	4	2	2	2	1	2	2	4
RISK FACTORS	Units	Years	NSW	Vic.	CHd	SA	WA	Tas.	NT	ACT	Aust.
High risk drinkers (of persons aged 18 years and over)	%	1989-90	4.7	3.7	4.9	3.9	3.7	2.8	9.1	5.2	4.3
Current smokers (of persons aged 18 years and over)	%	1989-90	28.8	27.6	28.4	27.8	28.1	28.8	39.8	30.3	28.4
Acceptable weight (of person aged 18 years and over)	%	1989-90	48.3	48.3	47.3	46.5	48.2	48.2	40.7	52.8	48.0
Fully immunised children aged six years (of six year olds)	%	1989-90	64.7	67.0	76.4	68.8	73.2	61.8	71.7	72.2	68.7
SERVICES	Units	Years	NSW	Vic.	Qid	SA	WA	Tas.	NT	ACT	Aust.
Average Medicare services processed per person	no.	1991-92	9.6	8,2	8.5	8.5	7.5	7.7	7.1	4.9	8.6
Acute hospital beds per 1,000 population	no.	1990-91	4.7	5.1	5.6	4.9	5.5	5.9	4.8	3.7	5.0
Average length of stay in hospital	days	1990-91	5.3	5.2	5.1	5.1	5.2	5.6	5.2	5.0	5.1
Doctors per 100,000 population	no.	1991	239	235	212	256	206	204	210	238	230
EXPENDITURE	Units	Years	NSW	Vic.	Qid	SA	WA	Tes.	NT	ACT	Aust
Persons with private health insurance (of population)	%	1992	50.0	46.6	38.3	54.4	53.3	50.0	44.7	53.7	47.8

### Health — definitions and references

- Acceptable weight the estimates are based on Quetelet's body mass index (BMI), which is calculated as weight (in kilograms) divided by the square of height (in metres). Persons classified as acceptable weight had a BMI of 20.0-25.0. Reference: National Health Survey: Health Risk Factors (4380.0)
- Acute hospital beds per 1,000 population total number of beds in all hospitals per 1,000 estimated mean resident population.

  Reference: Department of Health, Housing and

Community Services Annual Report

- AIDS related deaths deaths where AIDS was determined to be the underlying cause. Reference: Causes of Death (3303.0)
- Alcohol: apparent consumption millilitres of alcohol, not total alcoholic beverages, consumed divided by the population aged 15 years and over. Apparent consumption of beer and spirits is based on quantities on which excise duty was paid and imports cleared for consumption in Australia. Apparent consumption of wine comprises quantities sold by winemakers and imports cleared for consumption. Home production of beer and wine is not included.

Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)

- Apparent consumption equals (commercial production + estimated home production + imports + opening stocks) minus (exports + usage for processed food + non-food usage + wastage + closing stocks) divided by the population. Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306,0)
- Average length of stay in hospital the total number of occupied bed days in both public and private hospitals divided by the total number of admissions. Reference: Australian Institute of Health and Welfare Health Expenditure
- Average Medicare services processed average number of services used per person enrolled in Medicare.

Reference: Health Insurance Commission *Annual Report* 

Cancer — malignant neoplasms. Reference: Causes of Death, Australia (3303.0)

- Crude death rate number of deaths registered during the calendar year per 1,000 of the mean estimated resident population.

  Reference: Deaths, Australia (3302.0)
- Current smokers persons aged 18 years and over who smoke one or more manufactured (packet) eigarettes, roll-your-own eigarettes, eigars or pipes per day. Smoking excludes chewing tobacco and smoking of non-tobacco products.

  Reference: National Health Survey: Health Risk Factors, (4380.0)
- Doctors per 100,000 population the number of general medical practitioners and specialist medical practitioners per 100,000 mean estimated resident population.

Reference: Characteristics of Persons Employed in Health Occupations, Australia (4346.0)

- Fetal death the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat.

  Reference: Perinatal Deaths, Australia (3304.0)
- Fully immunised the proportion of children reported as having received all the required vaccinations for diphtheria, tetanus, poliomyelitis, whooping cough, measles and mumps appropriate for their age. Reference: National Health Survey: Children's Immunisation, (4379.0)

- High risk drinkers males who drank more than 75ml of absolute alcohol per day and females who drank more than 50ml of absolute alcohol per day.

  Reference: National Health Survey: Health Risk Factors, (4380.0)
- Infant mortality rate the annual number of deaths of children under one year of age per 1,000 live births. Reference: Deaths, Australia (3302.0)
- Ischaemic heart disease heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris).
  Reference: Causes of Death (3303.0)
- Life expectancy at birth the average number of years a person might expect to live if the age-specific death rates of the given period continued throughout his or her lifetime.

  Reference: Deaths, Australia (3302.0)
- Live birth the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who after being born, breathes or shows any other evidence of life such as a heartbeat.

  Reference: Perinatal Deaths, Australia (3304.0)
- Neonatal death any child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who is born alive (as defined under live birth) and who dies within 28 days of birth.

  Reference: Perinatal Deaths, Australia (3304.0)
- Perinatal mortality rate the number of fetal and neonatal deaths (as defined) per 1,000 live births and fetal deaths combined.

  Reference: Perinatal Deaths, Australia (3304.0)
- Persons with private health insurance proportion of the total population with private health insurance. Reference: Health Insurance Survey (4335.0)
- Road accident Reference: Causes of Death (3303.0)
- Standardised death rate the overall death rate that would have prevailed in a standard population if it had experienced at each age the deaths rates of the population being studied. The standard population used in these calculations is the 1986 Australian population.

Reference: Deaths, Australia (3302.0)

Suicid

Reference: Gauses of Death (3303.0)

- Tobacco: apparent consumption grams of tobacco consumed divided by the population aged 15 years and over. Apparent consumption of tobacco is based on the quantity on which import duty and excise was paid and does not include duty or excise free tobacco.
  - Reference: Customs and Excise Revenue, Australia (5425.0)
- **Total fats: apparent consumption** the total fat content of food apparently consumed, in grams, divided by the total population.

Reference: Apparent Consumption of Foodstuffs and Nutrients, Australia (4306.0)

- Total health expenditure as a proportion of GDP total health expenditure as a proportion of gross domestic product at current prices.

  Reference: Australian Institute of Health and Welfare Health Expenditure
- Total health expenditure per person total health expenditure per person in Australian dollars at constant 1984-85 prices.

  Reference: Australian Institute of Health and Welfare Health Expenditure

### Youth suicide

#### CAUSES OF DEATH

Youth suicide rates in Australia are higher than in many other countries, and are increasing.

Death rates from suicide are considerably higher for young men than for young women, and for young rural men than for young urban men.

Overall, suicide is still a fairly rare event, claiming around 17 lives per 100,000 population per year in 1988-92. In comparison, cancer claimed over 180 lives per 100,000 population. Nevertheless, for the younger age groups which have low levels of mortality, the suicide rate of 16 per 100,000 population, competes with road accidents as the leading cause of death. In 1992, suicide accounted for 378 male and 77 female deaths in the 15-24 years age group. Thus any change in the suicide rate for young people has the potential to affect the overall level of youth mortality significantly.

The age-specific pattern of suicide has changed over the past 20 years. During the 1970s suicide rates tended to increase with age for both males and females. For males this pattern changed in the 1980s and early 1990s. During this period the youth suicide rate increased and suicide rates at older ages decreased. The increase in youth suicide rates, in particular the rate for males, and the consequent potential years of life lost has become a cause for concern.

#### Suicide

To be classified as suicide a death must be recognised as due to other than natural causes. It must also be established by coronial inquiry that death results from a deliberate act of the deceased with the intention of ending his or her own life.

Suicide rates can vary considerably from year to year. In statistical terms a considerable proportion of this variability may be due to chance. Figures therefore need to be interpreted with caution. To counteract the volatility in the data to some degree and to overcome problems with small numbers that can occur when dealing with detailed disaggregations, most figures presented in this review have been averaged over 5 years. Where data have been averaged, the mid-year of the average is presented in tables.

#### Years of potential life lost

Years of potential life lost measures the amount of life lost in a population as a result of premature mortality. In this instance, premature mortality is taken as deaths of persons aged 15-24 years from suicide.

Table 1
Suicide death rates(a) by age and sex

5 year mid-year	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
· · · · · · · · · · · · · · · · · · ·	rate	rate						
Males								
1975	14.8	18.3	23.1	27.0	23.1	30.2	30.4	20.9
1980	18.0	22.7	22.6	23.9	23.9	24.3	30.6	27.5
1985	21.4	26.4	22.7	23.2	24.9	26.9	35.7	24.3
1990	26.5	29.5	25.8	24.3	23.2	26.2	35.1	26.7
Females								
1975	4.6	7.2	10.8	13.9	13.4	10.0	7.0	9.2
1980	4.5	6.7	8.6	11.7	10.2	9.0	6.7	8.0
1985	4.8	6.0	7.0	9.7	8.8	7.9	7.4	7.0
1990	4.9	7.1	6.9	7.3	8.1	7.7	8.4	6.9
Persons								
1975	9.8	12.9	17.1	20.6	18.1	19.3	15.3	15.2
1980	11.4	14.9	16.0	18.0	17.0	16.1	15.4	15.1
1985	13.3	16.3	15.0	16.6	16.8	16.6	17.7	15.6
1990	15.9	18.4	16.5	16.0	15.7	16.2	18.3	16.7

(a) Rates per 100,000 population in the same age and sex groups.

Source: Causes of Death

#### International comparison



The youth suicide rate in Australia is high by international standards. Of the 24 countries on which the World Health Organisation reported in 1992, Australia had the fourth highest suicide rate for 15-24 year olds. If the same countries are compared in terms of their suicide rates for the population as a whole Australia falls in the mid-range.

It is generally acknowledged that suicides are under-reported as a cause of death. The degree of under-reporting varies from country to country, partly for cultural and social reasons, but also because of differences in legal requirements and administrative procedures in arriving at a verdict of suicide1.

#### Suicide rate(a) 15-24 year olds

Country	Year	Males	Females	Persons
		rate	rate	rate
Iceland	1991	61.0	4.9	33.3
Finland	1991	42.2	7.3	25.1
New Zealand	1989	37.9	7.0	22.6
Australia	1991	26.7	6.4	16.7
Switzerland	1991	26.0	6.2	16.2
Canada	1990	24.6	5.0	15.0
Norway	1990	22.1	6.3	14.4
Sweden	1989	19.8	8.3	14.2
USA	1989	22.2	4.2	13.3
Hungary	1991	19.6	5.3	12.6
Singapore	1990	13.3	7.7	10.6
Germany	1990	14.4	4.3	9.5
Poland	1991	15.8	2.4	9.3
ireland	1990	14.2	4.1	9.3
France	1990	14.1	4.4	9.3
Denmark	1991	12.0	3.6	7.9
UK	1991	11.5	2.3	7.0
Japan	1991	9.1	4.7	7.0
Netherlands	1990	8.2	3.6	5.9
Spain	1989	8.4	1.9	5.2
Israel	1989	6.2	3.6	4.9
Portugal	1991	6.9	2.1	4.6
Italy	1989	5.1	1.6	3.4
Greece	1990	5.2	1.1	3.2

<sup>(</sup>a) Rate per 100,000 population in the same age and sex groups

Source: World Health Organization (1992) World Health Statistics Annual

Possible causes of increases in suicide rates include drug and alcohol dependence, family breakdown, unemployment and financial distress. However, clear relationships are hard to establish, and in particular to generalise to the population level.

#### Years of potential life lost

More than 230,000 years of potential life were lost as a result of suicide deaths of young Australians (aged 15-24 years) in the decade to 1992. The years of potential life lost from suicide have consistently increased as a proportion of the total from all causes of death, from 12% in 1983 to 23% in 1992. In contrast, the proportion of years of potential life lost as a result of deaths of young Australians due to motor vehicle traffic accidents has declined, from 46% in 1983 to 31% in 1992.

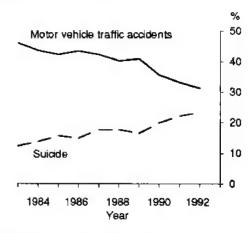
#### Sex differentials

Men in general are four times more likely to commit suicide than women. In the 15-24 years age group men are more than five times more likely than women to commit suicide.

There has been speculation on the reasons for such a marked sex difference in suicide rates. These include the links between unemployment and low self-esteem. particularly among young men2. A further hypothesis is that at least part of the difference is due to a higher success rate

Figure 1

#### Years of potential life lost(a), males aged 15-24 years



(a) Suicides and motor vehicle traffic accidents as a proportion of all causes.

Source: Causes of Death

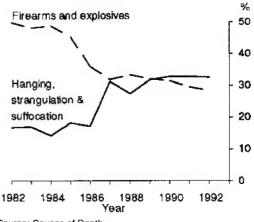
among men, who often use more violent means<sup>3</sup>.

#### **Methods of suicide**

In 1972, the leading method of suicide for young men was using firearms or explosives (44%). However, by 1992, suicide by hanging, strangulation or suffocation had become their leading method of suicide (33%). The shift in method occurred in the mid to late 1980s. During this period the death rate for young male suicide by firearms and explosives decreased marginally, from 9 to 8 per 100,000, while the rate for suicides by hanging, strangulation and suffocation increased substantially, from 3 to 8 per 100,000. These data contradict much of the recent literature which has focused on the greater use of firearms as the cause of the increase in young male suicides.

In contrast, the most prevalent method used by young women was poisoning by solid or liquid substances, accounting for 29% of cases in 1988-92. Although the incidence of suicide from hanging, strangulation and suffocation also increased among young women during the mid to late 1980s the corresponding rate was much lower than that of young men (less than 2 per 100,000). Firearms were used in 13% of cases and hanging, strangulation and suffocation in 24%.

Figure 2
Selected methods of suicide, males aged 15-24 years



Source: Causes of Death

Support for the argument that the higher male suicide rate is due in part to their success rate comes from hospital separations data. In both Queensland and South Australia (the only two States for which data are available) female separation rates for attempted suicide or self-inflicted injury are similar to male separation rates. This could be interpreted as an indication that men and women actually attempt suicide or other selfdestructive acts at approximately the same rate and that it is the higher success rate among men which leads to their higher completed suicide rate. However, without further detailed research this conclusion must be treated as speculative.

Table 2

Methods of suicide, 1988-92

	Males		Females			
Method of suicide	15-24 years	Ail ages	15-24 years	All ages		
	%	%	%	%		
Poisoning by solid or liquid substances	7.8	12.2	28.6	38.4		
Poisoning by gases in domestic use	0.3	0.3	0.3	0.4		
Poisoning by other gases and vapours	17.3	21.9	14.9	12.9		
Hanging, strangulation and suffocation	31.4	26.5	24.3	20.6		
Submersion (drowning)	0.9	1.9	1.8	5.7		
Firearms and explosives	30.9	26.4	12.8	6.2		
Cutting and piercing instruments	0.8	1.8	1.2	1.9		
Jumping from a high place	3.7	3.8	9.4	7.1		
Other and unspecified means	7.0	5.3	6.7	6.8		
Total	100.0	100.0	100.0	100.0		

Source: Causes of Death

Table 3

Rate of hospital separations(a) related to attempted suicide or self-inflicted injury, 1990

State	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75 years and over	Total
	rate	rate						
Queensland								
Males	94.0	72.0	46.6	30.6	17.5	13.2	23.1	45.1
Females	102.5	69.9	55.2	43.3	20.2	10.8	14.6	48.7
South Australia								
Males	123.7	118.7	82.1	71.5	20.0	19.2	36.1	70.2
Females	128.8	107.8	93.5	88.0	32.2	29.8	34.4	74.9

<sup>(</sup>a) Rates per 100,000 hospital separations. Separations comprise discharge, transfer to another hospital or death in hospital.

Source: Hospital Morbidity, Queensland; Hospital Statistics, South Australia; Estimated Resident Population

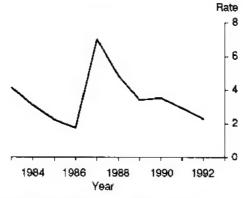
#### **Deaths** in custody

The Royal Commission into Aboriginal Deaths in Custody focused attention on the high proportion of Aboriginal and Torres Strait Islanders who die in custody. However, deaths in custody for the total population also increased substantially in the late 1980s. In the 12 years from 1980 to 1992, 185 young men and 7 young women died in custody. During this period 70% of young men died from hanging and 16% from natural or drug-related causes. Hanging also accounted for two thirds of the female deaths in custody<sup>4</sup>.

In 1987 deaths in custody from self-inflicted and natural causes increased for both the

Figure 3

Deaths in custody rates<sub>(a)</sub>, males aged 15-24 years



(a) Rates per 1,000 male prisoners aged 15-24.

Source: Australian Institute of Criminology

#### Hospital data

Hospital data need to be interpreted with some caution. Cases are only reported as attempted suicide or self-inflicted injury/poisoning when the discharging medical officer can confirm this fact. Some under-reporting may therefore be involved. Further, because there are potential differences in reporting procedures, comparisons between States should be made with caution. It should also be noted that not all cases of self-inflicted injury will have suicide as the intended result. At best the figures presented here can be seen as an indicator of self-destructive behaviour.

Aboriginal and Torres Strait Islander population and the non-Aboriginal and Torres Strait Islander population. The total number of deaths in custody of young men increased four-fold in one year, from 7 in 1986 to 29 in 1987. 24 of these deaths were from hanging, accounting for nearly a quarter of all young male suicide deaths from hanging, strangulation and suffocation. Since 1987, however, the numbers of deaths in custody have reverted to their previous rate, whereas the suicide rate from hanging, strangulation and suffocation for young men in the total population has continued at the higher level.

#### Urban/rural differences

The most marked geographic differences in youth suicide rates are between young men in urban and rural areas. Suicide rates for men of all ages and for women differ little between rural and urban locations. However, for young men the rural suicide rate is considerably higher. As with the difference in suicide rates between men and women this

Table 4

Methods of suicide by urban/rural location, 1987-91

	Urban		Rural		Total	
Method of suicide	15-24 years	All ages	15-24 years	All ages	15-24 years	All ages
	%	%	%	%	%	%
Poisoning by solid or liquid substances	12.0	20.0	6.9	10.5	10.9	18.0
Poisoning by gases in domestic use	0.4	0.4	0.0	0.2	0.3	0.4
Poisoning by other gases and vapours	18.0	20.1	10.4	17.9	16.3	19.6
Hanging, strangulation and suffocation	30.7	25.3	27.8	21.4	30.0	24.5
Submersion (drowning)	1.0	2.8	0.2	2.6	8.0	2.8
Firearms and explosives	22.7	18.0	50.2	41.8	29.0	23.0
Cutting and piercing instruments	1.1	2.0	0.2	1.5	0.9	1.8
Jumping from a high place	5.8	5.1	8.0	1.3	4.7	4.3
Other and unspecified means	8.2	6.3	3,5	2.7	7,1	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Causes of Death

may at least in part be due to higher success rates due to the use of more violent means. In the period between 1987 and 1991, over 50% of youth suicides committed in rural areas involved the use of firearms. In urban areas the corresponding proportion was 23%. Conversely, poisoning by gases and vapours other domestic use gases was higher in urban than in rural areas, 18% compared to 10% respectively.

A recent study<sup>5</sup> found that the greatest increases in suicide rates for youth have occurred in the smaller rural towns, with populations less than 4,000 people. The study suggests that the general movement of young people from inland to coastal areas may have resulted in greater social disadvantage for those who remain in rural areas.

### For more information

- Causes of Death, Australia (3303.0)
- Suicides, Australia (3309.0)
- Detailed inquiries: Assistant Director, Health Statistics (06) 252 5975
- General inquiries:
   see p. 209

Table 5
Urban/rural suicide rates<sub>(a)</sub>,
1987-91

	Urban		Rural	
Sex	15-24 years	All ages	15-24 years	Ali ages
	rate	rate	rate	rate
Male	25.0	21.3	36.6	22.6
Female	5.1	6.0	5.0	4.0
Total	15.2	13.6	21.6	13.5

(a) Rates per 100,000 in the same age and sex group. Source: Causes of Death

#### **Endnotes**

- Ruzicka, L.T., Choi C.Y. (1993) Suicide mortality in Australia, 1970-1991 Journal of the Australian Population Association Vol. 10, no. 2.
- 2 Hassan, R. (1990) Unlived lives: trends in youth suicide Australian Institute of Criminology Conference, Adelaide.
- 3 Haines, J. et al (1992) Trends in youth suicide: a comparison between youth and other suicide Australian Institute of Criminology Conference Proceedings No. 13 Preventing youth suicide.
- 4 Australian Institute of Criminology, unpublished data.
- 5 Dudley, M. (1994) Suicide among young Australian, 1964-1991: urban-rural trends Public Health Association Conference on Suicide Prevention Strategies, Camberra.

### Tobacco use

#### RISK FACTORS

While the proportion of smokers in the population has declined, the decrease is mainly due to people giving up smoking rather than not taking up the habit.

Tobacco use is recognised as a major preventable cause of disease, disability and death. In recent years per capita apparent consumption of tobacco for the population aged 15 years and over has declined from 7.7 grams a day in 1982 to 5.4 grams a day in 1992 (see *Health* — national summary table p. 52). Recent national surveys also indicate significant reductions in the proportion of adult (aged 18 years and over) smokers. In 1977, 37% of adults were current smokers. By 1989-90 this proportion had declined to 28%. These declines are associated with changes in the patterns of tobacco use.

While the proportion of people aged 18-24 years who smoked decreased from 40% in 1977 to 36% in 1989-90, this decrease was much larger for men than for women. In 1977 a larger proportion of men aged 18-24 years smoked than women, 42% compared to 37%. However, in 1989-90, 36% of both men and women aged 18-24 years were current smokers.

#### Taking up smoking

In 1989-90 the majority (60%) of both current smokers and ex-smokers reported that they began smoking between the ages of 15 and 19 years. A further 17% of current smokers and 15% of ex-smokers started before they were 15 years old. Over the last 50 years women have been taking up smoking at younger ages; 5% of women aged 65 years and over started smoking before they were 15 years old compared to 22% of women aged 18-24 years. There has consequently been an

#### Adult smoker

A person aged 18 years or over who smokes one or more manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes per day. Smoking excludes chewing tobacco and smoking of non-tobacco products.

increase over time in the proportion of adolescent girls smoking.

#### **Consumption patterns**

Although a smaller proportion of adults were smoking in 1989-90 compared to 1977, the cigarette consumption of those who smoked was greater. In 1977, 33% of male smokers smoked more than 20 cigarettes (the most common pack size at that time) a day. By 1989-90 the proportion had risen to 42%. For female smokers the proportional increase in daily cigarette consumption was even greater. Between 1977 and 1989-90 the proportion of female smokers smoking more than 20 cigarettes a day doubled from 14% to 28%.

In 1989-90 daily cigarette consumption for both men and women was greater for 25-64 year olds than for younger and older age groups. The lower consumption level of people in the 18-24 years age group reflects the higher proportion of smokers in this group who have only recently taken up smoking. It is not clear whether the lower daily cigarette consumption of those aged 65 years and over reflects a decline in consumption in old age, a higher proportion of deaths of heavy smokers before 65 years of

Table 1
Smoker status of people aged 18 years and over

	1977			1989- <del>9</del> 0		
Smoker status	Males	Females	Persons	Males	Females	Persons
	%	%	%	%	%	%
Never smoked	31.8	61.0	46.5	39.1	57.4	48.4
Ex-smoker	22.8	10.0	16.3	28.8	17.8	23.2
Current smoker	45.4	29.0	37.2	32.1	24.7	28.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Current smoker aged						
18-24 years	41.7	36.9	39.9	35.9	36.0	36.0

Source: National Hearth Survey

Table 2
Patterns of tobacco use of adult cigarette smokers, 1989-90

	18-24 years	25-44 years	45-64 years	65 years & over	Total
	%	%	%	%	%
Men who began smoking aged under 15 years	21.9	17.3	20.2	21.4	19.3
Women who began smoking aged under 15 years	22.3	11.4	6.6	5.4	11.3
Men smoking over 20 cigarettes a day	25.1	45.3	49.1	32.4	41.6
Women smoking over 20 cigarettes a day	19.2	32.1	32.0	18.7	28.4
Men smoking cigarettes with 14mg or more of tar	22.8	30.0	34.3	30.4	29.8
Women smoking cigarettes with 14mg or more of tar	12.8	16.9	19.3	18.1	16.7
Men smoking cigarettes with 1.5mg or more of nicotine	20.1	23.4	24.9	24.3	23.1
Women smoking cigarettes with 1.5mg or more of nicotine	11.5	14.4	14.9	13.1	13.8
	000	.000	'000	'000	'0000
Male current smokers	353.4	981.3	500.9	136.7	1 972.3
Female current smokers	343.5	753.0	343.8	118.3	1 558.6

Source: National Health Survey

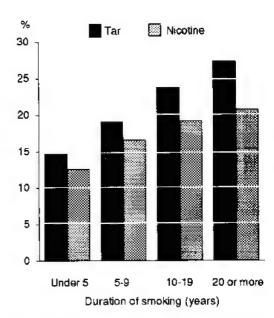
age or an age cohort with a lower cigarette consumption level throughout their life.

The tar and nicotine content of eigarettes smoked varies according to both a person's age and the length of time they have been smoking. Among persons who had been smoking for less than 5 years, 15% smoked cigarettes with 14mg or more of tar compared to 27% of those who had been smoking for 20 years or more. However, it should be noted that this does not necessarily mean that smokers graduate to higher tar content cigarettes over time. It is likely that the majority of those who have been smoking for 20 years or more have always smoked medium to high tar cigarettes. Lower tar cigarettes have only become more widely available and more popular in recent years hence their prevalence among younger smokers.

The pattern of nicotine content reflects the pattern of tar content because higher tar content cigarettes generally have higher levels of nicotine. Among those who had smoked for less than 5 years, 13% smoked cigarettes with 1.5mg or more of nicotine compared to 21% of those who had been smoking for 20 years or more. A greater

Figure 1

Smokers smoking high tar and high nicotine cigarettes(a)



(a) High tar is defined as 14mg or more per digarette. High nicotine is defined as 1.5mg or more per digarette.

Source: National Health Survey

proportion of men than women smoked cigarettes with 14mg or more of tar (30% compared to 17%) and with 1.5mg or more of nicotine (23% compared to 14%).

#### Socio-economic status

The prevalence of smoking differs between occupation groups with 'blue collar' workers generally having a high proportion of smokers. In 1977, the highest prevalence of smoking was recorded for miners and quarrymen (71%) followed by tradesmen, production-process workers and labourers (48%), compared to 29% for professional and technical workers. A similar pattern was evident in 1989-90 although the proportions of both 'blue collar' and 'white collar' workers who smoked had dropped since 1977. In 1989-90 the highest prevalence of smoking was recorded for labourers and related workers, plant and machine operators and drivers (40%) and tradespersons (38%). In contrast, 17% of professionals reported that they currently smoked. A relatively high proportion of the unemployed were smokers (44%).

Smoking is also linked with education; the higher the level of education a person has completed, the less likely that person is to smoke. 16% of people with a bachelor degree or higher were current smokers in 1989-90 compared to 33% of those with a trade/apprenticeship and 30% of those with no post-school qualifications.

#### Family status

Family status is also an important variable in considering smoking behaviour. In 1989-90 half of lone mothers smoked compared to one-quarter of married mothers. The pattern was similar for fathers with 51% of lone fathers smoking compared to 34% of married

#### International comparison



Australia has a similar proportion of smokers to other OECD countries. Japan is a notable exception where there is a large difference in the proportion of smokers between the sexes.

#### Smokers as a proportion of the population aged 15 years and over

Country	Year	Males	Females
		%	%
Australia	1989-90	29.9	26.6
Canada	1990	29.5	26.9
Japan	1990	60.5	14.3
New Zealand	1990	27.8	27.8
Sweden	1990	25.8	26.2
United Kingdom	1990	31.0	29.0
United States	1990	28.4	22.8

Source: OECD Health Systems: facts and trends 1960-1991

fathers. Of those people without dependants, 37% of single men were current smokers, as were 26% of married men, 26% of single women and 20% of married women.

#### Tobacco use and alcohol

There is a relationship between tobacco and alcohol consumption. A high proportion of people who smoke also consume alcohol, 80% of men and 62% of women in 1989-90. Of those who had never smoked, 66% of men and 45% of women consumed alcohol. The proportion of both male and female current smokers rises with increased alcohol consumption. For men, 24% of those who consumed no alcohol were current smokers compared to 60% of those who consumed alcohol at high risk level. The level of alcohol

Table 3 Family and smoker status, 1989-90

	With dep	endants			Without dependants			
	Lone fathers	Lone mothers	Married tathers	Married mothers	Single men	Single women	Married men	Married women
	%	%	%	%	%	%	%	%
Never smoked	29.6	32.0	39.3	54.4	44.8	59.1	33.9	61.5
Ex-smoker	19.7	17.9	26.8	20.3	18.4	14.6	40.1	18.8
Current smoker	50.7	50.1	33.9	25.3	36.8	26.3	26.0	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Health Survey

Table 4

Tobacco and alcohol consumption, 1989-90

	Did not	Did not Alcohol risk level			
Smoker Status	consume	Low	Medium	High	Total who consumed
	%	%	%	%	%
Males					
Never smoked	49.8	38.8	25.1	17.0	35.3
Ex-smoker	26.2	30.7	28.8	22.9	29.7
Current smoker	24.0	30.5	46.1	60.1	35.0
Total	100.0	100.0	100.0	100.0	100.0
Smoked more than 20 cigarettes per day	35.6	32.6	41.8	53.3	37.3
Females					
Never smoked	66.0	52.7	33.0	19.5	49.4
Ex-smoker	14.5	20.9	22.2	15.7	20.9
Current smoker	19.5	26.4	44.8	64.8	29.6
Total	100.0	100.0	100.0	100.0	100.0
Smoked more than 20 cigarettes per day	30.3	24.1	28.8	46.9	26.4

Source: National Health Survey

consumption and the number of cigarettes smoked per day are also related. Among male low risk drinkers, 33% reported smoking more than 20 cigarettes a day, while among high risk drinkers the proportion was 53%. Among women, the proportions were 24% and 47% respectively. For both men and women, those who consumed alcohol at low to medium risk levels had the highest proportions of ex-smokers.

#### Reasons for quitting

The decrease in the proportion of smokers is due largely to people quitting smoking. In 1989-90 almost three-quarters of all cigarette smokers reported that they had attempted to give up smoking. There are a number of reasons why people give up smoking, but concern for their health was reported most frequently (45% in 1989-90 compared to 35% in 1977). The reasons given for quitting smoking tend to differ according to the age at which the person quit. Reasons associated with ill-health are more often reported in older age groups.

The proportion of people giving up smoking because they felt it was unclean or offensive also increased, from 2% in 1977 to 9% in 1989-90, suggesting that the promotion of negative images of smoking is having an effect on smokers. However, the proportion of smokers quitting due to the expense has

#### Alcohol risk

The daily consumption risk levels used are those defined by the National Health and Medical Research Council and differ for males and females.

Alcohol risk	Males	Females
Low	<50ml	<25ml
Medium	50-75ml	25-50ml
High	>75ml	>50ml

declined. In 1977, 11% of ex-smokers said they had quit because of the expense but this dropped to 10% in 1989-90.

#### III health

Health risks associated with smoking include cancers, respiratory diseases such as bronchitis and emphysema, and circulatory diseases including thrombosis and heart disease. In 1989-90 a greater proportion of smokers (11%) and ex-smokers (10%) aged 65 years and over had bronchitis and emphysema as a long-term condition than people of the same age who had never smoked (3%).

In 1977 there were 4,326 deaths from lung cancer representing 4% of all deaths. In 1989-90 there were 6,053 deaths from lung

cancer (5% of all deaths). This increase was largely due to an increase in the death rate from lung cancer among women. In 1977 there were 11 per 100,000 female deaths from lung cancer compared to 19 per 100,000 in 1990. In comparison, the rates remained similar for men (50 per 100,000 in 1977 and 52 per 100,000 in 1990).

#### **Adolescent Smoking**

The ABS has not conducted any surveys to measure adolescent smoking. However, the Anti-Cancer Council of Victoria has conducted a series of three surveys to measure adolescent tobacco and alcohol tise<sup>1,2,3</sup>

In 1987, 25% of boys and 29% of girls aged 17 years old were current smokers. In 1990 this had decreased marginally to 24% and 28% respectively. While girls are more likely than boys to be smoking by 17 years, at 12 years of age the reverse is true. In 1990, 6% of boys aged 12 years were current smokers compared to 5% of girls of the same age.

### Adolescent smokers and drinkers

A current smoker is defined as a person aged 12-17 years who consumed at least one cigarette in the week preceding the survey.

A *current drinker* is defined as a person aged 12-17 years who consumed at least one alcoholic drink in the week preceding the survey.

These patterns were similar to those recorded in 1984.

### Consumption patterns of adolescents

Adolescent girls are more likely to smoke than adolescent boys. However, boys tend to consume more when they do smoke. In 1990, the average number of cigarettes smoked a week by boys aged 12 years was 9. By 17 years of age this had risen to 43. For girls, the average number of cigarettes smoked a week rose from 8 at age 12 years to 30 at age 17 years. Consumption patterns have remained steady over time with no significant difference in the average number of cigarettes smoked a week between 1984 and 1990.

Adolescent tobacco consumption is largely a social activity and as such peak consumption occurs at social gatherings on weekends. Almost a quarter of current smokers smoked only at the weekend. For boys, weekday cigarette consumption was about 4 a day rising to a peak of 7 a day on Saturdays. A similar pattern occurred among girls with weekday consumption of about 3 a day rising to a weekend peak of 6 a day on Saturdays.

There is a relationship between the average number of cigarettes smoked a week and packet size. Those buying a large pack size smoked more a week than those buying smaller packs. In 1990, boys who bought packs of 25 smoked an average of 33 cigarettes a week. For girls who bought the same pack size the average was 22. However,

Table 5
Adolescent tobacco consumption, 1990

Smoker status and cigarette consumption	Aged 12 years	Aged 13 years	Aged 14 years	Aged 15 years	Aged 16 years	Aged 17 years
	%	%	%	%	%	%
Males						
Never smoked	61	49	41	32	29	27
Current smoker (smoked in last week)	6	11	17	22	25	24
Females						
Never smoked	69	53	41	29	25	24
Current smoker (smoked in last week)	5	13	20	29	28	28
	no.	no.	no.	no.	no.	no.
Mean number of cigarettes per week						
Males	9	19	22	33	38	43
Females	8	13	22	27	28	30

Source: Anti-Cancer Council of Victoria

for boys and girls buying packs of 40, the average numbers of cigarettes smoked a week were 41 and 42 respectively. In the 1987 survey it was found that packs of 15 were more popular among smokers aged 12-15 years than among smokers aged 16-17 years, probably due to their lower price per packet. Between 1988 and 1990, this pack size was banned in all States. Packs of 40 were introduced between 1988 and 1990, and these have been marketed as budget packs with a lower price per cigarette. In 1990, 17% of 12-15 year olds and 9% of 16-17 year olds reported buying this larger pack size. However, packs of 25 have remained the most popular among both age groups.

### For more information

- National Health Survey: Smoking (4382.0)
- Detailed inquiries: Assistant Director, Health Surveys (06) 252 6403
- General inquiries: see p. 209

# Availability of cigarettes to adolescents

54% of boys and 52% of girls who smoked reported that they had bought their last cigarette themselves. However, purchasing cigarettes was strongly age related. 25% of boys and 21% of girls aged 12 years bought their own cigarettes compared to 64% of boys and 66% of girls aged 17 years. The most frequently reported source of cigarettes for adolescents was 'a friend'.

# Effects of parents smoking

There is an association between adolescent smoking and the smoking status of parents. In 1985, 13% of children who reported their parents to be smokers were themselves current smokers, compared to 8% of children who reported their parents to be non-smokers. In families where only one parent smoked, girls were more likely to be smokers if the parent who smoked was the mother. However, the sex of the parent who smoked had little effect on the smoking status of boys<sup>4</sup>.

# Tobacco use and alcohol among adolescents

As with adults, there is an association between smoking and alcohol consumption among adolescents. Of all boys aged 12-17 years who were current drinkers in 1990, 38% also smoked. Of those boys who were not current drinkers, 8% smoked. For girls there was a similar pattern. Of all girls aged 12-17 years who were current drinkers in 1990, 45% also smoked. Of all girls who were not current drinkers, 10% smoked.

# **Endnotes**

- 1 Hill, D.J. et. al. (1987) Tobacco and alcohol use among Australian secondary schoolchildren. Med J Aust; Vol.146.
- 2 Hill, D.J. et. al.(1990) Tobacco and alcobol use among Australian secondary schoolchildren in 1987. Med J Aust; Vol. 152.
- 3 Hill, D.J. et. al. (1993) Tobacco and alcohol use among Australian secondary school students in 1990. Med J Aust; Vol. 158.
- 4 Gliksman, M.D. et. al. (1989) Cigarette smoking in Australian schoolchildren. Med J Aust; Vol 150.

# Children's immunisation

# RISK FACTORS

Although the overall proportion of young children fully immunised against the major infectious diseases has increased, the proportion of six year olds in 1989-90 who were fully immunised against whooping cough had decreased since 1983.

Immunisation programs for children are recognised as one of the most effective public health interventions. Infectious diseases such as diphtheria, whooping cough and polio are no longer major causes of death and disability in Australia due to mass immunisation programs.

Between 1983 and 1989-90, due to the introduction of a combined measles/mumps vaccination, there was a rise in the proportion of six year olds fully immunised against measles. However, during the same period there was a decline in the proportion fully immunised against whooping cough. Overall the proportion of six year olds fully immunised against diptheria/tetanus, whooping cough, polio and measles rose from 55% in 1983 to 71% in 1989-90. The low level of full immunisation against all conditions in 1983 (6%) reflects the introduction of the mumps vaccine in 1983

Table 1
Six year olds fully immunised

Disease	1983	1989-90	
	%	%	
Diphtheria/tetanus	92.8	93.1	
Whooping cough	93.1	85.1	
Poliomyelitis	58.6	79.5	
Measies	64.8	91.5	
All above conditions	54.7	71.1	
Mumps	13.7	87.2	
All conditions	6.2	68.7	

Source: Children's Immunisation Survey (1983); National Health Survey (1989-90)

### Immunisation status

Immunisation status is defined in terms of the degree to which the recommended course of vaccination against a particular disease has been received. Children who have received all the vaccinations appropriate to their age are regarded as fully immunised, while those who have received only some of them are regarded as partly immunised. Full immunisation status does not necessarily imply complete immunity since in a small number of cases the vaccination may not take effect.

# Recommended childhood immunisation schedule

Age	Disease
2, 4 and 6 months	Diphtheria, tetanus, whooping cough, poliomyelitis
12-15 months	Measles, mumps
18 months	Diphtheria, tetanus
5 years	Diphtheria, tetanus, poliomyelitis

Source: National Health and Medical Research Council (1986) Immunisation Procedures

and the consequent low proportion of six year olds fully immunised against mumps. In 1989-90, 69% of six year olds were fully immunised against all conditions.

Recently there has been concern over perceived low levels of immunisation against conditions such as whooping cough and measles in Australia. There have also been reported outbreaks of these diseases in some States. Reported cases of measles rose from 248 in 1988, when the disease was declared

Table 2

Cases of notifiable diseases reported

Disease	1988	1989	1990	1991	1992	<b>1993</b> p
	no.	no.	no.	no,	no.	no.
Diphtheria	61	1	7	8	14	39
Measles	248	169	880	1 380	1 425	4 461
Whooping cough	153	614	862	337	739	3 956
Poliomyelitis	_		_	_		_
Tetanus	5	11	6	7	14	8

Source: Department of Health, Housing and Community Services Annual Report

notifiable to 4,461 in 1993. In addition there were 153 cases of whooping cough in 1988 compared to 3,956 in 1993. However, deaths from these two conditions remain low with 18 deaths due to measles and 6 due to whooping cough in the period 1988-92<sup>1</sup>.

Many parents may now have little understanding of the seriousness of paralytic poliomyelitis, diphtheria and whooping cough and this may have contributed to the difficulties in achieving maximum immunisation levels.

Children are potentially at risk of contracting the various infectious diseases throughout all their early years of life. A more complete picture of their immunisation status is therefore obtained by examining the entire 0-6 years age group. The comparison of the change in the rates of immunisation between 1983 and 1989-90 is based on the immunisation status of six year olds because comparable data for age 0-6 years are not available for 1983.

In 1989-90, 59% of children aged 0-6 years were fully immunised against all the conditions: diphtheria, tetanus, whooping cough, polio, measles and mumps, and 4% were not immunised against any conditions. The majority of these children were aged under six months. The proportions of children not immunised for any conditions decreased with age possibly indicating late immunisation against certain conditions. 38% of children aged 0-6 years were partly immunised against some conditions, mostly whooping cough and polio. The highest proportions of children partly immunised were aged one year.

67% of one year olds were fully immunised against measles in 1989-90 compared to 92% of two year olds. The low level of immunisation of one year olds reflects the later administration of the measles vaccine rather than a failure to immunise. Later immunisation for measles may be partly due to the low occurrence of fatal attacks of measles in Australia. There were a total of 45

Table 3

Immunisation status of children aged 0-6 years, 1989-90

Immunisation status	Less than 6 months	6 to less than 12 months	1 year	2-3 years	4-6 years	Total 0-6 years
	%	%	%	%	%	%
Fully immunised						
Diphtheria/tetanus	43.3	95.3	96.8	95.0	92.3	90.4
Whooping cough	42.9	67.3	89.7	66.9	81.0	74.2
Poliomyelitis	37.7	63.2	81.9	87.3	77.7	76.9
Measles			67.3	92.6	92.6	88.6
Mumps	••		66.1	89.1	86.8	84.4
All conditions	37.2	62.0	56.4	59.5	61.9	58.5
Partly immunised						
Diphtheria/tetanus	16.9	2.9*	1.6*	4.0	6.9	5.7
Whooping cough	16.4	29.8	7.3	30.7	15.9	20.2
Poliomyelitis	15.5	30.0	13.7	10.1	20.4	17.0
Measles		• •				
Mumps				4.1	• •	
All conditions	23.0	36.1	42.2	39.6	37.5	37.5
Not immunised						
Diphtheria/tetanus	39.8	1.9*	1.6*	1.0*	8.0	3.9
Whooping cough	40.7	2.9*	2.9	2.4	3.1	5.6
Poliomyelitis	46.7	6.8	4.4	2.5	1.9	6.2
Measies			32.7	7.4	7.4	11.4*
Mumps			33.9	10.9	13.2	15.6
All conditions	39.8	1.9	1.4	0.9	0.7	4.0

Source; National Health Survey

registered deaths from measles between 1982 and 1992, with 9 of these being children aged 0-6 years<sup>1</sup>. There may also be some concern by parents about administering the vaccine to babies less than one year old.

### **Immunisation and immigration**

Children of Australian born mothers were more likely to be fully immunised than children of mothers born overseas. There was also an association between the time that overseas born mothers had lived in Australia and the immunisation status of their children.

Children whose mothers had arrived most recently in Australia had the lowest levels of full immunisation. One-third of children whose mothers had arrived in the previous five years were fully immunised in 1989-90 compared to half of children whose mothers had been in Australia for ten years or more. Children whose mothers had arrived in Australia within the last five years had particularly low rates of full immunisation against whooping cough and measles.

Some insight into differences between overseas born groups can be obtained by examining language spoken at home by the mother. Children of mothers who spoke only English at home had immunisation levels close to the children of Australian born mothers. However, in general, English speaking migrants have been in Australia longer than other migrants. Those children whose mothers spoke Greek or Chinese languages at home had the highest levels of full immunisation (64%-65%), while those children whose mothers spoke Vietnamese or other Asian languages (other than Chinese)

## International Comparison



The World Health Organisation estimated the number of fatal attacks of measles to be just under 900,000 world wide in 1990. Non-fatal attacks of measles can also have serious consequences and may be associated with subsequent malnutrition, pneumonia, diarrhoea, vitamin A loss, blindness and deafness.

Targets set for measles immunisation by UNICEF were 80% of one year olds immunised against measles by 1990 and 90% by the year 2000. In *The Progress of Nations* released by UNICEF in 1991, Australia was ranked 26th among industrialised nations in terms of measles immunisation of children aged one year old.

# One year olds fully immunised against measles, 1991

Country	%	Country	%
Australia	68	Korea	96
Canada	85	Malaysia	79
China	95	New Zealand	90
France	69	PNG	52
Greece	76	Singapore	90
Hong Kong	42	Sweden	95
Indonesia	78	UK	89
Italy	50	USA	77
Japan	73	Vietnam	88

Source: UNICEF (1991) The Progress of Nations

had the lowest levels of full immunisation (36% and 26% respectively). Polio had a particularly low full immunisation rate (43%) among children whose mothers spoke Asian languages other than Vietnamese or Chinese.

Table 4

Fully immunised proportion of children aged 0-6 years, 1989-90

Birthplace of mother	Diphtheria/ tetanus	Whooping cough	Polio	Mumps(a)	Measles(a)	All conditions
	%	%	%	%	%	%
Australia	90.9	75.1	78.3	89.2	86.1	56.1
Overseas	88.9	71.5	72.4	87.5	<i>79.5</i>	52.1
Arrived before 1980	91.5	75.5	75.4	89.8	85.6	50.4
Arrived 1980-1984	88.4	72.5	70.2	88.0	79.0	42.7
Arrived 1985-1990	82.5	60.1	66.8	81.2	63.1	32.3
Total	90.4	74.2	76.9	88.6	84.4	58.5

(a) Children aged 1-6 years.

Source: National Health Survey

Table 5
Fully immunised proportion of children aged 0-6 years with overseas born mothers, 1989-90

#### Whooping ΑJI Language spoken at home Diphtheria/ conditions (by mother) tetanus cough Polio Mumps(a) Measles(a) % % % % % % 90.4 73.6 76.2 88.6 80.3 54.5 English 45.5 Arabic (including Lebanese) 83.8 62.3 55.9 86.1 84.5 65.0 81.3 92.5 75.5 Chinese languages 90.4 79.0 71.6 100.0 100.0 63.7 90.6 79.3 Greek 84.0 37.1\* 56.5\* 84.8 87.2 69.6 Italian 66.0\* 35.9\* 53.3\* 67.5\* 66.0\* Vietnamese 78.5 70.6 51.8 42.7 81.2 62.6 26.1\* Other Asian languages Other European languages 90.5 72.6 73.4 81.9 78.4 50.0 68.7 87.0 68.2 43.0 89.9 66.7 Other languages 79.5 52.1 88.9 71.5 72.4 87.5 Total

Source: National Health Survey

#### **Endnotes**

1 Causes of Death (3303.0).

# For more information

- National Health Survey: Children's Immunisation (4379.0)
- Detailed inquiries: Assistant Director, Health Surveys (06) 252 6403
- General inquirtes:
   see p. 209

<sup>(</sup>a) Children age 1-6 years.

# Distribution of general practitioners

# HEALTH SERVICES

Between 1986 and 1991 the ratio of the number of general practitioners to the population decreased slightly, while the specialist to population ratio increased.

The geographic distribution of general practitioners (GPs) is an important issue for health services because the proximity to GPs is probably the most important factor affecting access to primary medical care. The issue is also important for GPs since the numbers and types of doctors and their distribution among the population affect the nature of their work life.

In Australia there has been concern over the high numbers of GPs and the imbalance in their geographic distribution<sup>1</sup>. In 1991 there were 25,500 GPs working in Australia, 91% of them in urban areas. 85% of the total population lived in urban areas.

# **GPs** and other occupations

From 1976 to 1991 the number of people employed in health occupations per 100,000 population rose from 1,301 to 1,572. However, between 1986 and 1991 the number of GPs grew only slightly and at a lower rate than the population as a whole. This resulted in a decline in the GP to population ratio.

Most of the growth in the number of medical practitioners between 1986 and 1991 can be attributed to a 48% increase in the number of specialists. This increase in specialist numbers ensured the continuing rise in the doctor to population ratio despite the relatively small increase in GPs.

# Classification of health occupations

People employed in *health occupations* consist of persons who diagnose physical and mental illness and recommend, administer, dispense and develop medications and treatment to promote or restore good health.

General practitioners refers to registered general medical practitioners who diagnose and treat physical and mental illness, disorders and injuries, recommend preventative action and refer patients to specialist medical practitioners such as cardiologists, dermatologists, gynaecologists and obstetricians, ophthalmologists, paediatricians, psychiatrists and surgeons.

Table 2
Selected occupation to population ratios(a)

Occupation	1986	1991
	rate	rate
GPs	149	147
Police	212	212
Lawyers/solicitors	145	166
Social workers	40	41
Ministers of religion	77	72

(a) Rate per 100,000 estimated resident population.

Source: Census of Population and Housing

Table 1
Persons employed in health occupations

Health occupations	1976		1986		1991	
	,000	rate(a)	'000	rate(a)	'000	rate(a)
General practitioners	n.a.	n.a.	23.8	149	25.5	147
Specialists	n.a.	n.a.	9.0	56	13.4	77
Total medical practitioners	21.2	150	32.8	205	38.8	224
Registered nurses	n.a.	n.a.	138.2	863	139.4	804
Total nurses	1 <b>36</b> .0	969	182.2	1 137	188.6	1 088
Dentists	4.6	33	6.3	39	6.7	39
Total health occupations	182.6	1 301	254.0	1 586	272.6	1 572

(a) Rate per 100,000 estimated resident population.

Between 1986 and 1991 the rate per 100,000 population of GPs, police and social workers remained fairly stable. In comparison there was an increase in the number of lawyers and solicitors and a decrease in the number of ministers of religion per 100,000 population.

#### **GP** distribution

In 1991 GPs were concentrated in major urban areas with populations of 100,000 or more. There were 180 GPs per 100,000 population in major urban areas compared to 95 per 100,000 in rural areas.

These rates are also reflected in the distribution of other health occupations, most notably specialists. However, the distribution of specialists is affected by the location of larger hospitals which are usually in major urban centres. Indeed in 1991, there were over twice the number of specialists per 100,000 population in major urban centres than in other urban or rural areas.

However, an important factor which must be considered in relation to GP distribution in Australia is GP mobility. In remote Australia the Royal Flying Doctor Service provides a high degree of mobility for medical workers servicing remote areas and communities, thereby improving access to medical services.

### **GP** characteristics

In 1991 the majority of GPs were male (70%). However, the proportion of female GPs has increased from 25% in 1986 to 30% in 1991. There were also higher concentrations of female GPs in major urban areas where 32% of GPs were women. In both other urban and rural areas three-quarters of GPs were male.

Urban areas also tended to have greater proportions of GPs of younger ages. In urban areas 43% of GPs were aged under 35 years

Geographic classification

The geographic classification used in this review is based on population size. Proximity of rural areas to major urban centres or the remoteness of any urban area has not been considered.

- Major urban urban centres with a population of 100,000 and over.
- Other urban urban centres with a population of 1,000 to 99,999.
- Rural all other areas including country towns with populations under 1,000.

Data used in this review are from the Census of Population and Housing which collects information about people on the basis of where they live rather than where they work. Given that some proportion of the rural population lives adjacent to urban population centres, it is likely that some rural GPs work in major towns and cities.

compared to 25% in rural areas. This current age difference may be important in the future if the retirement of GPs in rural areas is not adequately compensated for by recruitment of younger GPs, thereby worsening the imbalance in GP geographic distribution.

Major urban centres also have higher concentrations of GPs from non-English speaking backgrounds. However, this pattern reflects the general settlement pattern of people from non-English speaking backgrounds who are concentrated in major urban areas.

#### Work and income

There are some important differences in the work of GPs according to geographic location. GPs in other urban and rural areas reported working longer hours than those in major urban centres. While 45% of GPs in major urban centres reported working 49

Table 3
Health occupations, 1991

Health occupations	Major urban		Other urban		Rural	
	no.	rate(a)	no.	rate(a)	no.	rate(a)
General practitioners	18 906	180	4 002	106	2 387	95
Specialists	10 489	100	1 629	43	1 114	45
Registered nurses	90 997	866	29 300	779	18 712	748
Dentists	4 907	47	1 122	30	649	26
Total health occupations	125 299	1 192	36 053	959	22 862	914

(a) Rate per 100,000 estimated resident population.

hours or more per week, 57% in other urban and 51% in rural areas reported the same.

In accordance with the higher proportions of GPs working longer hours per week, GPs in other urban and rural areas reported higher gross annual incomes with 49% of other urban and 47% of rural GPs reporting incomes of over \$60,000 a year, compared to 39% of GPs in major urban centres.

In 1991, 9% of GPs lived in rural areas and in 1989-90, 9% of all consultations took place in rural areas<sup>2</sup>. In 1989-90 the most frequent treatments received by people consulting a GP were prescriptions for medication (61%) and blood pressure checks (38%). There were no marked differences between urban and rural areas in the types of treatment given by GPs. The majority of consultations occurred in the doctor's office or surgery (94% in urban areas and 95% in rural areas).

# International comparison



Australia has a higher GP to population ratio than Canada, New Zealand, the United Kingdom or the United States. Australia also has a higher nurse to population ratio than Canada and the United States. However, these two countries have higher specialist to population ratios and dentist to population ratios than Australia.

# Ratio(a) of health workers to population, selected countries

Country	Year	General pract- itioners	Spec- lalists	Nurses	Dent- ists
		rate	rate	rate	rate
Australia	1991	147	77	1 088	39
Canada	1990	103	92	841	54
NZ	1989	73	п.а.	n.a.	37
UK	1990	59	n.a.	n.a.	37
USA	1989	22	114	648	56

(a) Rate per 100,000 estimated resident population.

Source: Organisation for Economic Co-operation and Development OECD Health Systems: facts and trends 1960-1991

Table 4

Characteristics of general practitioners, 1991

Characteristics	Major urban	Other Urban	Rural
	%	%	%
Male	68.1	74.8	74.4
Female	31.9	25.2	25.6
Aged 15-24 years	4.3	2.9	1.3
Aged 25-34 years	38.7	33.6	23.3
Aged 35-44 years	26.3	32.4	38.6
Aged 45-54 years	15.3	14.4	20.1
Aged 55 years and over	15.3	16.6	16.7
Born in non-English speaking country	26.3	15.1	14.1
Has post-graduate qualifications	17.9	18.9	19.6
Worked 49 hours or more a week	45.3	57.1	51.4
Gross annual income over \$60,000	38.7	48.5	46.6

Source: Cansus of Population and Housing

# For more Information

- Characteristics of Persons Employed in Health Occupations, Australia (4346.0)
- Detailed inquiries: Assistant Director, Health Surveys (06) 252 6403
- General inquiries:
   see p. 209

### Endnotes

- Department of Health, Housing and Community Services (1992) The Future of General Practice National Health Strategy Issues Paper No. 3.
- 2 National Health Survey.

# Private health insurance: who has it?

# HEALTH EXPENDITURE

The proportion
of the
population
choosing to
have private
health
insurance has
been declining.

In the early 1980s, the proportion of the population covered by private health insurance was between 60% and 70%. Following the introduction of Medicare in February 1984 there was a substantial decline in the proportion privately insured. In March 1986, 53% of people were covered by private health insurance compared to 65% in June 1983. By June 1992, people covered by private health insurance represented 48% of the population.

Implications of this decline in private health insurance coverage include a greater tendency for people in need of hospital care to use the public hospital system and a relatively smaller pool of funds available for treatment of patients in private hospitals.

An individual or family decision to take out private health insurance is influenced by many factors including the perceived adequacy of Medicare, personal and family health status, the affordability of private health insurance and access to health services through government health concession cards<sup>2</sup>. In turn these factors are influenced by age, income and family composition. Analysing patterns of private health insurance coverage by these variables provides an insight into which groups in the population are more, or less, likely to insure privately.

#### Health status

The 1989-90 National Health Survey found that about one-third of people who considered their health to be poor were covered by private health insurance. The highest levels of private health insurance coverage were found among people who

# Types of private health insurance

There are two distinct types of private health insurance products: hospital insurance and ancillary insurance. Hospital insurance can be used as an alternative or supplement to Medicare funded hospital services by providing the ability to seek private patient treatment from a doctor of choice in a public or private hospital. Ancillary health insurance mainly provides cover for services not funded by Medicare although some such services are provided at no, or low, cost to certain sections of the population e.g. holders of government health concession cards. In June 1992, 8.2 million people were covered by private health insurance; 6.0 million had both hospital and ancillary cover, 1.5 million had hospital cover only and 0.7 million had ancillary cover only.

considered they were in excellent health, regardless of age. However, this finding is confounded by income which is positively correlated with both age and health status.

#### Income

The level of private health insurance coverage increases with increasing income, and a greater variation in coverage occurs across income groups than across age, family status or health status groups. Of people in contributor units with low incomes (less than \$240 gross a week) in 1992, 24% (637,000 persons) were covered by private health insurance compared to 68% (4.6 million persons) of those in contributor units with high incomes (\$600 or more gross a week). Of all persons in contributor units with private health insurance 8% were in low

Table 1

Proportion of people with private health insurance, 1989-90

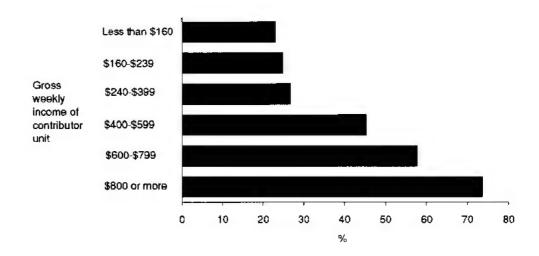
Health status(a)	18-34 years	35-64 years	65 years and over	Total
	%	%	%	%
Excellent	51.4	65.8	48.7	57.8
Good	44.1	61.1	43.1	51.9
Fair	35.6	48.0	38.0	42.2
Poor	35.4	37.2	27.9	33.2

(a) Health status is self-assessed

Source: National Health Survey

Figure 1

Persons in contributor units with private health insurance, 1992



Source: Health Insurance Survey

income units, 33% in middle income units and 59% in high income units. Two-thirds of contributor units who ceased private health insurance in the two years prior to 1992 gave their reason as no longer being able to afford it.

# Age

Private health insurance coverage generally increases with age. However, of those contributor units where the contributor was aged 65 years or more in 1992, 61% had no private health insurance. While this is in part due to the generally lower incomes of people in this contributor age group, many also had

### Contributor unit

A contributor unit, as defined in Health Insurance Surveys, consists of a contributor to a health insurance scheme plus all persons in the same family who are covered by the health insurance arrangements of the contributor. As such it may be considered analogous to a family unit. The following persons are assumed to be covered by the health insurance arrangements of the contributors.

- all children under 15 years of age;
- unmarried full-time students between 15 and 25 years of age without dependants of their own and who are living with their parents;
- a spouse, unless both partners have separate health insurance arrangements, in which case they are considered to be two contributor units.

access to government health concession cards.

Of contributor units where the contributor was aged 65 years or more, 79% were covered by government health concession cards. However, 74% of those not covered by government health concession cards had private health insurance. This left about 80,000 contributor units where the contributor was aged 65 years or more with neither private health insurance nor government health concession cards.

Type of private health insurance coverage also varies with age. Persons in contributor units where the contributor was aged 35-64 years were four times more likely to have ancillary only insurance than those contributor units where the contributor was aged 65 years or more. Part of the reason for this may be that for the aged some ancillary services are available at no, or low, cost through public hospitals and community health centres. Some States also have low cost dental and eye care schemes for the aged.

# Age and income

When age and income are combined as factors involved in private health insurance cover, a more complicated pattern is revealed, although, in general terms, private health insurance coverage increases with age and income.

Table 2

Contributor unit income by age of contributor, 1992

Income	15-34 years	35-64 years	65 years and over	Total
	'000	'000	'000	,000
Low income(a)				
Privately insured	194.5	134.9	180.1	509.5
Not insured	717.7	456.7	468.9	1 643.3
Middle income(b)				
Privately insured	516.2	578.5	256.6	1 351.3
Not insured	1 006.5	763.7	361.8	2 132.0
High income(c)				
Privately insured	497.9	1 116.6	73.2	1 687.7
Not insured	347.3	461.1	14.0	822.5
Total(d)				
Privately insured	1 252.3	1 962.5	562.0	3 776.8
Not insured	2 141.3	1 764.5	872.2	4 777.9

- (a) Less than \$240 gross per week.
- (b) \$240-\$599 gross per week.
- (c) \$500 or more grass per week.
- (d) Includes Income not known.

Source: Health Insurance Survey

In 1992, the youngest, low income contributor units had the lowest level of private health insurance coverage at 21% and the oldest, high income units had the highest at 84%. Private health insurance coverage increased for each age and income group except the oldest, middle income contributor units whose level of coverage was lower than that of middle aged, middle income units. Contributor units with high incomes were more likely than other groups to have combined hospital and ancillary insurance,

77% compared to 59% of contributor units with low incomes.

## **Family composition**

Contributor units consisting of couples (with or without dependent children) had the highest levels of private health insurance coverage (over 50%), while those consisting of one contributor and dependent children had the lowest (23%). For all contributor unit types level of insurance coverage increases with income. The higher level of private

Table 3

Proportion of contributor units with private health insurance, 1992

Income	Contributor and dependent children	Contributor only	Contributor and partner	Contributor, partner and dependent children	Total
	%	%	%	%	%
Low income(a)	11.2	23.6	37.2	38.0	23.7
Middle income(b)	22.8	42.8	38.8	34.4	38.8
High income(c)	57.0	63.8	67.8	69.4	67.2
Total(d)	23.3	37.9	51.6	55.7	44.1

- (a) Less than \$240 gross per week.
- (b) \$240-\$599 gross per week.
- (c) \$600 or more gross per week.
- (d) includes income not known.

Source: Health Insurance Survey

Contributor and dependent children Contributor only Contributor and Ancillary only partner Hospital only Contributor, partner and dependent children Hospital and ancillary 0 10 20 30 40 50 60

Figure 2

Contributor units with private health insurance, 1992

Source: Health Insurance Survey

# For more information

- Health Insurance Survey, Australia (4335.0)
- Detailed inquiries: Assistant Director, Health Surveys (06) 252 6403
- General inquiries:
   see p. 209

health insurance coverage for contributor units containing couples reflects their generally higher incomes. Of such contributor units, 48% received high incomes, 42% received middle incomes and 4% received low incomes. Of contributor units consisting of a contributor (with or without dependent children), 15% received high incomes, 40% received middle incomes and 42% received low incomes.

Couples with dependent children were more likely than other types of contributor units to have hospital and ancillary cover while couples without dependent children had the highest rate of hospital only cover. Ancillary only cover was more prevalent in contributor units with dependent children than in those without.

#### **Endnotes**

%

- 1 Unless otherwise stated statistics presented in this review are drawn from the Health Insurance Survey.
- 2 Willcox S. (1991) A Healthy Risk? Use of Private Health Insurance National Health Strategy Issues Paper No. 4.

# **Education**

National and State summary tables	78
PARTICIPATION IN EDUCATION	
Education of Aboriginal and Torres Strait	81
Aboriginal and Torres Strait Islander participation in all levels of education is lower than total participation but is increasing rapidly, especially among young people.	
Time spent on education	86
Not only are an increasing number of Australians participating in education but those who do participate are spending more time on it. In 1992, those who participated in education did so for approximately six hours a day.	
Gender differences in higher education	90
More women than men participate in higher education. While women are increasingly more likely to choose fields of study in which they have been under-represented, men continue to make traditional choices.	
EDUCATIONAL ATTAINMENT	
People with degrees	94
In 1991, 8% of people aged 15 years and over held a degree or higher educational qualification. This was more than four times the proportion in 1971.	

# **Education** — national summary

PARTICIPATION	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
School students	'000	3 0 1 6	3 018	3 006	3 001	3 005	3 022	3 031	3 042	3 075	3 099	n.y.a.
TAFE students	'0000	786	832	859	887	937	952	932	967	986	1 043	n.y.a.
Higher education students	'000	349	357	370	390	394	421	441	485	535	559	576
Year 12 apparent retention rate	%	40.6	45.0	46.4	48.7	53.1	57.6	60.3	64.0	71.3	77.1	n.y.a.
Aged 15-24 years (of all aged 15-24 years)												
Participating in any education	%	36.5	38.0	39.5	40.1	41.9	43.5	44.9	45.5	47.6	49.1	48.2
Participating in TAFE	%	8.5	8.2	8.9	8.4	8.7	9.6	9.7	9.2	9.6	9.9	9.5
Participating in higher education	%	7.3	8.3	8.0	8.0	8.8	9.2	10.8	12.0	12.7	13.7	13.1
Women aged 15-24 years participating in tertiary education (of all tertiary students aged 15-24 years)	%	п.а.	п.а.	n.a.	42.4	45.1	45.7	43.9	46.4	46.6	47.2	48.2
ATTAINMENT	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Aged 15-69 years with post-school qualifications (of all aged 15-69 years)	%	n.a.	35.5	35.4	36.5	38.2	38.6	39.7	39.8	40.8	41.8	43.2
Degree or higher	%	n.a.	7.0	7.3	7.6	7.4	7.6	8.0	8.4	8.7	9.4	9.8
Trade qualification	%	n.a.	(a)	(a)	(a)	13.8	13.6	13.5	13.2	13.1	13.3	13,6
Certificate or diploma	%	n.a.	(a)27.7	(a)26.9	(a)27.7	16.7	17.0	18.0	17.7	18.6	18.7	19.3
Aged 15-69 years and did not complete highest level of secondary school (of all aged 15-69)	%	n.a.	48.3	48.1	46.8	44.7	43.7	42.7	41.8	40.2	38,8	37,2
Women aged 15-69 years with post-school qualifications (of all aged 15-69 years with post-school qualifications)	%	n.a.	41.8	41.9	42.1	42.1	41.8	42.9	42.2	<b>43</b> .1	43.5	43.6
EDUCATION AND WORK	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Unemployment rate (aged 15-69 years)												
With degree or higher	%	n.a.	5.2	3.4	3.9	3.6	3.6	4.0	4.3	4.8	5.9	6.2
With trade qualification	%	n.a.	(a)	(B)	( <b>a</b> )	5.0	4.8	3.6	3.6	6.6	8.7	9.6
With certificate or diploma	%	n.a.	(a)7.3	(a)5.8	(a)5.4	6.2	6.1	5.3	5.0	7.6	9.1	10.2
Without post-school qualifications	%	п.в.	12.6	11.7	10.9	11.5	10.0	9.2	8.8	11.5	14.2	14.8
Apprentices	.000	138.8	131.9	128.6	130.4	138.9	147.1	151.7	161.0	150.1	142.9	122.4
SERVICES	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
School student/teacher ratio	no.	16.1	15.6	15.3	15.3	15.1	15.1	15.3	15.3	15.4	15.3	п.у.а.
Government schools	no.	7 546	7 544	7 561	7 589	7 575	7 535	7 5 1 3	7 490	7 470	7 448	п.у.а.
Non-government schools	no.	2 362	2 481	2 502	2 496	2 504	2 519	2 523	2517	2 5 1 0	2 509	n.y.a.
EXPENDITURE	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	1											
Govt expenditure on education (of GDP)	%	5.7	5.5	5.4	5.4	5.2	4.9	4.7	4.7	5.0p	5.3p	n.y.a.

<sup>(</sup>a) Trade and certificate/diploma qualifications were combined prior to 1987.

Reference periods:

Schools data are at July. TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March from 1989; prior to that the reference date was 30 April. Apprenticeships data are at 30 June. Expenditure data are for financial years.

# **Education** — State summary

PARTICIPATION	Units	Years	NSW	Vic.	QId	SA	WA	Tas.	NT	ACT	Aust.
School students	'000	1992	1 050.2	787.6	537.0	248.8	293.6	86.3	33.6	61.9	3 099.0
TAFE students	'000	1992	359.6	297.2	173.3	74.4	91.4	18.7	11.0	17.0	1 042.5
Higher education students(a)	'000	1993	174.3	162.0	94.0	55.5	44.4	12.1	4.2	20.7	576.0
Year 12 apparent retention rate	%	1992	68.5	81.1	85.0	92.7	72.8	60,2	56.7	97.2	77.1
Aged 15-24 years (of all aged 15-24 years)											
Participating in any education	%	1993	50.3	50.8	43.7	44.8	44.4	45.0	52.7	57.6	48.2
Participating in TAFE	%	1993	12.2	8.6	6,1	9.4	10.2	8.9	6.1	9.3	9.5
Participating in higher education	%	1993	11.9	14.4	13.5	12.1	12.5	12.1	17.9	19.4	13.1
Women aged 15-24 years participating in tertiary education (of all tertiary students aged 15-24 years)	%	1993	47.0	49.5	48.9	49.1	47.8	45.1	32.1	54.2	48.2
ATTAINMENT	Units	Years	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Aged 15-69 years with post-school qualifications (of all aged 15-69 years)	%	1993	45.6	41.3	40.6	41.7	45.4	37.4	48.4	53.1	43.2
Degree or higher	%	1993	10.0	10.9	7.9	8.6	9.4	6.8	11.7	21.7	9.8
Trade qualification	%	1993	13.8	12.6	14.4	13.4	15.2	13.4	14.8	9,8	13.6
Certificate or diploma	%	1993	21.5	17.2	17.7	19.1	20.2	16.5	21.1	20.5	19.3
Aged 15-69 years and did not complete highest level of secondary school (of all aged15-69 years)	%	1993	37.1	37.5	39.1	38.6	36.3	38.1	28.8	19.7	37.2
EDUCATION AND WORK	Units	Years	NSW	Vic.	Qid	SA	WA	Tas.	NT	ACT	Ausi.
Unemployment rate (aged 15-69 years)											
With degree or higher	%	1993	5.4	6.8	5.8	8.3	6.5	8.6	*3.9	4.7	6.2
With trade qualification	%	1993	9.4	11.7	9.4	9.4	7.7	6.7	9.5	*3.7	9.6
With certificate or diploma	%	1993	10.1	11.3	10.4	10.0	8.7	10.2	10.0	7.3	10.2
Without post-school qualifications	%	1993	16.5	15.1	13.3	14.1	12.8	15.6	12.5	11.4	14.8
Apprentices	'000	1992	43.5	30.8	21.2	10.0	10.7	3.3	1,1	1.9	122.4
SERVICES	Units	Years	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust
School student/teacher ratio	ло.	1992	16.3	13.9	16.0	14.8	15.7	15.6	14.1	15.5	15.3
Government schools	no.	1992	2 180	2013	1 328	682	761	243	146	95	7 448
Non-government schools	no.	1992	857	687	402	184	250	66	25	38	2 509

<sup>(</sup>a) State totals exclude students of the Australian Catholic University.

Reference periods:

Schools data are at July. TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March from 1989; prior to that the reference date was 30 April. Apprentices data are at 30 June.

# Education — definitions and references

- Apprentice a person who has entered into a legal contract with an employer to serve a period of training for the purpose of attaining tradesperson's status in a recognised trade classification. Before signing indentures, the apprentice generally serves a probationary period, usually 3 months.

  Reference: Vocational Employment, Education and Training Advisory Committee Apprenticeship statistics
- Certificate or diploma completion of an approved certificate or diploma in secretarial or business studies, administration, teaching, nursing etc.

  Reference: Labour Force Status and Educational Attainment, Australia (6235.0)
- Degree or higher a bachelor degree (including honours), a graduate or post-graduate diploma, master's degree or a doctorate.

  Reference: Labour Force Status and Educational Attainment, Australia (6235.0)
- Did not complete highest level of secondary school a person who did not have any post-school qualifications (as defined) and who did not complete the highest level of secondary schooling (or equivalent) offered by the education system at the time they left school.

  Reference: Labour Force Status and Educational
  - Reference: Labour Force Status and Educationa Attainment, Australia (6235.0)
- Full-time equivalent (FTE) a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The calculation of FTE for part-time staff is based on the proportion of time worked compared to that worked by full-time staff performing similar duties. Some States are not able to calculate FTE on the basis of time, so use wages, resource allocations or student/teacher numbers to estimate FTE.

Reference: Schools, Australia (4221.0)

- GDP (gross domestic product) the total market value of goods and services produced in Australia after deducting the cost of goods and services used up in the process of production but before deducting consumption of fixed capital.

  Reference: Australian National Accounts: Concepts, Sources and Methods (5216.0)
- Government expenditure on education government final expenditure, personal benefit payments, advances to persons for HECS and other government expenditure.

  Reference: Expenditure on Education, Australia (5510.0)
- Government school a school (as defined) administered by the Department of Education in each State/Territory.

  Reference: Schools, Australia (4221.0)
- Higher education student a person for whom there is a full-time, part-time or external enrolment in a course at a higher education institution at the reference date. Higher education institutions include universities, institutes of technology, institutes of advanced education, institutes of higher education, institutes of tertiary education and agricultural colleges.

  Reference: Participation in Education, Australia (6272.0); Department of Employment, Education
- Non-government school a school (as defined) not administered by a Department of Education but including special schools administered by government authorities other than State/Territory Departments of Education.

and Training Selected Higher Education Statistics

Reference: Schools, Australia (4221.0)

- Post-school qualification a qualification held by a person who has left school and who, since leaving school, has obtained a trade qualification, certificate, diploma, degree or any other qualification.

  Reference: Labour Force Status and Educational Attainment, Australia (6235.0)
- School an educational institution which provides primary or secondary education on a full-time daily basis, or by radio or correspondence. Reference: Schools, Australia (4221.0)
- School student/teacher ratio number of school students (as defined) divided by full-time equivalent teachers (as defined) in both primary and secondary schools.

Reference: Schools, Australia (4221.0)

School student — a person who is enrolled in a school (as defined) and active in a course of study, other than pre-school or technical and further education (TAFE) courses.

Reference: Schools, Australia (4221.0)

- TAFE student a person for whom there is a full-time or part-time vocational stream enrolment in a college of technical and further education (TAFE) for the reference year.
  - Reference: Department of Employment, Education and Training Selected TAFE Statistics
- **Tertiary education** education provided by any institution offering post-school courses. This encompasses both the TAFE and higher education systems.

Reference: Participation in Education, Australia (6272.0)

- Total expenditure on education government expenditure on education (as defined) plus private final expenditure on education.

  Reference: Expenditure on Education, Australia
- Trade qualification completion of an approved trade/technical apprenticeship in a field such as fitting and turning, hairdressing, plumbing, carpentry etc.

  Reference: Labour Force Status and Educational Attainment, Australia (6235.0)
- Unemployment rate the number of unemployed persons in any group expressed as a percentage of the labour force in the same group.

  Reference: Participation in Education, Australia (6272.0)
- Year 12 apparent retention rate the percentage of full-time students of a given cohort group who continue from the first year of secondary schooling to Year 12.

Reference: Schools, Australia (4221.0)

# Education of Aboriginal and Torres Strait Islander people

## PARTICIPATION

Aboriginal and
Torres Strait
Islander
participation in all
levels of education
is lower than for
the total population
but is increasing
rapidly, especially
among young
people.

In the last decade the specific educational needs of Aboriginal and Torres Strait Islander people have been addressed in a number of reports and policy documents. In particular the report of the Aboriginal Education Task Force, presented in 1988, identified Aboriginal and Torres Strait Islander disadvantage in access to, and outcomes of, education. The report recommended a number of objectives and strategies including: parity in participation rates at all levels of education by the year 2000; encouraging participation in all fields of study, especially those which would benefit community development (health, architecture and building, agriculture, business studies, engineering, law, and the sciences); and increases in Aboriginal teachers at all levels. The Aboriginal Education Policy was launched in 1989 and updated for the second triennium (1993-95) in 1993.

Although many Aboriginal and Torres Strait Islander people face barriers to their participation in education, the barriers may vary. For some, the problems are of discrimination or inappropriate education. For others, location may lead to difficult physical access to particular types of educational institutions. This review focuses on differences between people in rural and urban areas and on changes in educational participation and attainment in the last decade.

## **Participation**

The rates of educational participation of Aboriginal and Torres Strait Islander people are lower than those of other Australians for all education levels. In 1991, 29% of Aboriginal and Torres Strait Islander 15-24 year olds were attending an educational institution compared to 46% of all 15-24 year olds. Equivalent figures in 1986 were 23% and 38% respectively.

Education participation rates among Aboriginal and Torres Strait Islander people increased across all ages in the 15-24 years age group between 1986 and 1991. These increases were proportionally greater for those aged 18-24 years as a consequence of the increased rates of school retention to Year 12, as well as the increased likelihood that young people will continue their education beyond secondary level. Higher education participation among Aboriginal and Torres Strait Islander people aged 15-24 years is low relative to the total population aged 15-24 years, 3% compared to 12% in 1991. However, the rate more than doubled between 1986 and 1991.

### **Higher education participation**

The 1988 Aboriginal Education Task Force report recommended a target of at least 2.5% of Aboriginal people in higher education by

Table 1

Education participation rates of Aboriginal and Torres Strait Islander people aged 15-24 years

	1986				1991			
Type of institution	15-17 years	18-19 years	20-24 years	15-24 years	15-17 years	18-19 years	20-24 years	15-24 years
	%	%	%	%	%	%	%	%
Secondary school	40.8	2.6	0.2	14.7	46.6	5.5	_	15.5
TAFE	3.8	4.6	3.0	3.6	4.7	7.4	4.3	5.1
Higher education	0.4	2.4	1.5	1.3	0.7	4.5	3.4	2.8
Other	5.9	2.7	1.5	3.3	14.1	2.3	1.9	5.7
Total	51.0	12.3	6.3	23.0	66.2	19.8	9.6	29.1
	'000	'000	'000	'000	'000	'000	'0000	'000
Total Attending	8.8	1.3	1.4	11.4	11.0	2.3	2.5	15.8

Table 2

Level of course of higher education students

	1982		1987		1993		
Level of course	Aboriginal students	All students	Aboriginal students	Ali students	Aboriginal students	All students	
	%	%	%	%	%	%	
Doctorate, master degree	0.6	7.3	2.0	7.8	3.5	10.8	
Other post-graduate	2.2	9.1	2.6	8.6	3.7	8.4	
Bachelor degree	(a)	65.3	35.1	67.0	53.8	74.7	
Diploma or certificate(b)	97.2(a)	18.2	60.3	16.7	39.0	6.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
	'000	'000	'000	1000	'000	1000	
Total courses	0.9	340.2	1.9	394.0	5.6	575.6	

<sup>(</sup>a) Bachelor degree and diploma/certificate not separately identified for Aboriginal students in 1982.

Source: Department of Employment, Education and Training Selected Higher Education Statistics

the year 2000 compared to 0.6% in 1986. In 1991, 1.2% of Aboriginal and Torres Strait Islander people were participating in higher education.

Between 1982 and 1987 the number of Aboriginal and Torres Strait Islander people enrolled in higher education doubled, and between 1987 and 1993 the number almost trebled again to reach 5,580. A further target recommended in the 1988 Task Force report was to increase the proportions of Aboriginal higher education students enrolled in post-graduate courses from 5% to 16% and in bachelor degree courses from 35% to 67%, with a view to reaching parity with all higher education students by the year 2000. By 1993, the proportion of Aboriginal and Torres Strait Islander students enrolled in bachelor

Table 3
Field of study of higher education students(a)

	1982		1987		1993		
Field of study	Aboriginal students	All students	Aboriginal students	All students	Aboriginal students	All students	
	%	%	%	%	%	%	
Agriculture, forestry	0.4	1.8	1.4	1.8	2.3	1.9	
Architecture, building	_	2.3	0.2	2.3	8.0	2.2	
Arts, humanities, social sciences	33.5	24.8	34.9	24.6	34.8	22.4	
Business, administration, economics	10.2	18.0	12.7	18.7	10.0	21.2	
Education	48.0	22.5	38.3	18.6	30.7	13.4	
Engineering, surveying	1.9	7.8	2.0	7.8	2.0	8.0	
Health	1.7	5.8	4.6	9.6	9.1	12.4	
Law	1.4	3.1	1.9	2.9	3.6	3.4	
Science	2.9	13.7	3.9	13.2	6.6	14.7	
Veterinary science	_	0.4	0.1	0.4	0.2	0.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	

<sup>(</sup>a) Excludes non-award courses.

<sup>(</sup>b) Includes non-award courses.

degrees had increased to 54% and in post-graduate courses to 7%.

Along with the substantial increase in the number of Aboriginal and Torres Strait Islander students between 1982 and 1993. the distribution of students across the different fields of study has become more diverse. While the proportions of Aboriginal and Torres Strait Islander students enrolled in arts, humanities and social sciences, and in business and administration remained unchanged between 1982 and 1993, there was a shift away from education (48% of students in 1982 down to 31% in 1993) even though the number of students enrolled in education increased from 400 to 1,700 over the period. This distributional shift was compensated for by shifts towards health (increased by 7 percentage points), science (increased by 4 percentage points), law, and agriculture, forestry (both increased by 2 percentage points). This pattern of change is similar to that which occurred for all students.

#### Attainment

Educational attainment is the level of education achieved by an individual. In population terms, educational attainment changes slowly over time in response to changing patterns of participation in education. A useful basic measure of educational attainment, particularly for those with no post-school qualifications, is the age at which they left school.

Between 1986 and 1991 there was some change in the level of schooling among Aboriginal and Torres Strait Islander people. In 1986, 7% were reported as never having gone to school compared to 5% in 1991. The proportion of people who left school aged 17 years or more increased from 13% to 19%.

Differences in age left school were observed between geographic locations. In 1991, Aboriginal and Torres Strait Islander people living in urban areas were more likely to have stayed at school longer than those living in rural areas. In addition, the proportion of people who had not attended school was considerably higher in rural areas than elsewhere. Although access to schooling, particularly beyond the compulsory years, may be more difficult for people living in rural areas, the association between geographic location and level of education is affected by population mobility. Some people from rural areas may move to towns and cities to complete their education but not return. This will result in higher levels of education in urban areas than in rural areas, both for Aboriginal and Torres Strait Islander people as well as for the population overall.

Between 1986 and 1991, the proportion of Aboriginal and Torres Strait Islander people who had left school aged 17 years or more increased for all locations. The proportions in urban areas increased by 7 percentage points (from 15% to 22% in major urban areas and from 13% to 20% in other urban areas) and the proportion in rural areas by 5 percentage points, from 11% to 16%. The proportions who had left school aged 19 years or more

Table 4

Aboriginal and Torres Strait Islander people aged 15 years and over by age left school

3								
	Major (	urban	Other u	ırban	Rural		Total	
Age left school	1986	1991	1986	1991	1986	1991	1986	1991
	%	%	%	%	%	%	%	%
Under 17 years	76.9	69.8	75.3	70.1	66.9	68.2	73.0	69.4
17-18 years	13.8	19.3	12.0	17.1	9.7	13.6	11,7	16.6
19 years or more	1.0	2.7	0.9	2.6	1.6	2.8	1.2	2.7
Still at school	6.6	6.7	7.5	6.9	5.7	5.3	6.7	6.3
Did not go to school	1.7	1.6	4.2	3.3	16.1	10.1	7.4	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	'000	'000	,000	'000	'000	,000	.000	1000
Total	34.2	43.7	56.4	63.2	46.5	52.7	137.1	159.7

Table 5
Highest qualification of people aged 15 years and over(a), 1991

	_	inal and '	Torres St	reit	All peo	ple		
Highest qualification	Major urban	Other urban	Rural	Total	Major urban	Other urban	Rural	Total
	%	%	%	%	%	%	%	%
Higher degree	1.3	0.4	0.7	8.0	4.3	1.7	2.2	3.5
Post-graduate diploma	2.4	1.4	2.8	2.1	4.0	3.4	3.6	3.8
Bachelor degree	11.0	4.6	6.5	7.8	24.5	14.2	16.1	21.3
Undergraduate diploma	12.9	11.5	14.0	12.6	14.1	14.4	17.4	14.6
Associate diploma	6.2	5.9	5.9	6.0	5.0	4.7	5.0	4.9
Skilled vocational	45.5	50.3	46.8	47.6	36.0	48.1	42.4	39.3
Basic vocational	20.7	25.9	23.3	23.1	12.2	13.4	13.3	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Excludes those still at school.

Source: Census of Population and Housing

were similar in 1991 (about 3%) for all locations. This, coupled with the drop of 6 percentage points in the proportion of Aboriginal and Torres Strait Islander people in rural areas who had never been to school, suggests that, increasingly, young Aboriginal and Torres Strait Islander people are gaining access to at least basic schooling without having to leave their home areas.

In 1991, 21% of Aboriginal and Torres Strait Islander people aged 15 years and over (31,600) stated that they had a post-school qualification, compared to 40% of all Australians. Of those Aboriginal and Torres Strait Islander people who stated that they had a qualification, 3% had obtained a post-graduate qualification and a further 8% had a bachelor degree. In comparison, 7% of all Australians had a post-graduate qualification and 21% had a bachelor degree. 71% of qualified Aboriginal and Torres Strait Islander people had vocational qualifications, 48% classified as skilled and 23% as basic. Equivalent figures for the total population were 39% and 13%.

Table 6
Field of study of qualified Aboriginal and Torres Strait Islander people aged 15 years and over, 1991

Field of study	Higher degree/ diploma	Bachelor degree	Diploma/ associate diploma	Skilled vocational	Basic vocational	Total qualified
	%	%	%	%	%	%
Business and administration	5.1	8.9	10.5	0.5	36.7	11.5
Health	2.0	13.2	27.4	0.2	20.9	11.1
Education	57.4	22.1	34.0	<u></u>	0.5	9.8
Society and culture	22.3	41.5	20.0	4.5	9.3	11.9
Natural and physical science	6.3	6.6	2.1	0.2	2.0	1.6
Engineering	1.1	2.3	3.4	49.7	6.2	26.0
Architecture and building	0.3	1.4	0.3	25.6	3.9	13.3
Agriculture and related fields	3.7	0.6	0.9	2.7	2.6	2.2
Other	1.7	3.5	1.5	16.6	17.8	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Aboriginal and Torres Strait Islander people from urban areas were more likely to have a higher level of qualification than those in other areas. The pattern of qualifications by location was broadly similar to that for the population overall.

Although the 1988 report of the Aboriginal Education Task Force recommended encouraging Aboriginal and Torres Strait Islander people to participate in fields of study which would benefit community development, it also stated 'The ultimate goal would be to have Aboriginal students enrolled in all higher education study areas to achieve parity in participation with the student population generally.'

Overall, of those who had a qualification in 1991, 26% were trained in engineering. This figure is, however, dominated by the quarter of all qualified Aboriginal and Torres Strait Islander people who had skilled vocational qualifications in engineering, mainly trades qualifications.

57% of Aboriginal and Torres Strait Islander people with a post-graduate qualification were qualified in education while 42% of those whose highest qualification was a bachelor degree were trained in the society and culture field, which includes arts, humanities, social sciences etc.

There was very little difference between urban and rural areas in the fields of study for those who held qualifications, although health and education had a slightly higher proportional share in rural areas.

### Teachers

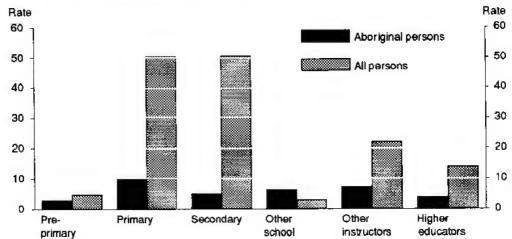
In the 1970s and early 1980s Aboriginal and Torres Strait Islander people were encouraged to enter the teaching profession at all levels to give other indigenous people mentors and role models. In 1988 the Aboriginal Education Task Force report still identified this as an important factor in encouraging indigenous people to continue their education. The report recommended a policy of achieving a goal of 1,000 Aboriginal teachers by 1990. In the 1991 Census, 946 Aboriginal persons identified as teachers, a rate of 36 teachers per 10,000 Aboriginal people. This compared to 26 per 10,000 in 1986. Overall in 1991 there were 145 teachers per 10,000 of the total population.

In the total population, the rates per 10,000 for primary school teachers and secondary school teachers were both about 50. Rates for the Aboriginal population were not only much lower but also the pattern was different with 10 Aboriginal primary school teachers per 10,000 Aboriginal population and 5 Aboriginal secondary school teachers per 10,000. When the younger age structure of the Aboriginal and Torres Strait Islander population is taken into account, the rates for primary and secondary school teachers are even lower at 57 and 38 respectively per 10,000 of the school age populations.

Figure 1
Teachers per 10,000 population, 1991

# For more information 50

- 1991 Census Aboriginal Community Profile, Australia (2722.0)
- Detailed inquiries: Assistant Director, Education Research Unit (06) 252 7798
- General inquiries: see p. 209



# Time spent on education

# PARTICIPATION

in 1992, those who participated in education did so for approximately six hours a day.

Over the last decade there has been a marked increase in attendance at educational institutions. This has led to an increase in the number of years spent in education for the population as a whole. However, there are marked differences in the average daily time spent on education according to age, labour force status and family circumstances.

# Increasing educational attendance

In 1983, 7% of people aged 15-64 years were undertaking full-time education; by 1993 this had risen to 10%. Most of the increase was due to increased retention of secondary school students (Year 12 retention increased from 41% in 1983 to 77% in 1992) and increased tertiary attendance by those aged 19-24 years.

The proportion of people aged 15-24 years undertaking full-time education increased from 27% in 1983 to 39% in 1993. At the same time the proportion undertaking part-time education remained steady at around 9%. The majority (82%) of students aged 15-24 years attended full-time in 1993, while the majority (76%) of students aged 25-64 years attended part-time.

#### Time spent on activities

In 1992 Australians aged 15 years and over spent an average 2% of their day on education compared to 14% on labour force activity. The time spent on education represented some 6.8 million hours a day. Those who participated in education on a full or part-time basis did so on average for about six hours a day. The time spent on education

#### Education

Education in this review refers to full-time, part-time or correspondence study by people aged 15 years and over at any institution whose primary role is educational. Included are schools, higher education establishments, colleges of technical and further education and public and private colleges.

# Students and participants in education

In this review, a distinction is made between the terms students and participants in education. A student is defined as a person who reported that they were currently undertaking study at a school, university, technical college or other educational institution. A participant in education is defined as a person who reported spending some time on educational activity during the days they were surveyed. Persons could thus be classified as students but not participants if they had not undertaken any educational activity during the period they were surveyed e.g. if they were surveyed during a school holiday period. Similarly, persons could be classified as participants in education but not as students if they had undertaken educational activity e.g. job-related training, but did not report that they were undertaking study at an educational institution.

# Time spent

Time spent is the average time in minutes per day averaged over a 7 day week. Time spent on education includes:

- attendance at educational/vocational courses;
- homework, study and research;
- associated travel;
- lunch and other breaks;
- attendance at other courses;
- job-related training;
- careers education;
- associated communications.

Table 1

Proportion of people studying

Student status	1983	1985	1987	1989	1991	1993
	%	%	%	%	%	%
Aged 15-24 years						
Full-time student	27.2	29.6	32.8	35.0	38.3	39.3
Part-time student	9.3	9.9	9.1	10.0	9.3	8.9
Aged 25-64 years						
Full-time student	0.5	0.7	8.0	1.0	1.1	1.4
Part-time student	5.0	5.0	5.4	5.5	5.8	4.4

Source: Survey of Transition from Education to Work

differed markedly according to age and life-cycle stage.

# Time spent on educational activities

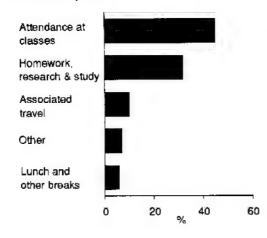
The time spent on education is made up of different associated activities. In 1992, approximately 45% of time spent on education was for attendance at educational/vocational courses, 32% of time spent was on homework, research and study, 10% was on associated travel and 6% was on lunch and other breaks.

Of those who reported undertaking educational activity in the 1992 Time Use Survey, people aged 15-24 years reported spending 6hrs 45mins a day on educational activities. Of people in this age group, those undertaking secondary education spent the most amount of time, over 7 hours a day, compared to 6hrs 37mins for those in other full-time education and almost 5 hours a day for those in part-time education. As expected, those undertaking secondary education spent the greatest amount of time attending classes, while those undertaking other full-time education spent more time on homework, research and study than any other group.

### Time spent by students

Average time spent on educational activity by students (three hours) is lower than the average time spent by those who participated

Figure 1 Proportion of education time spent on selected educational activities, 1992



Source: Time Use Survey

# International comparison (15)



Australia's education participation rate among people aged 15 years and over is the same as Canada's and the average time spent on education by students in each country is similar.

## Participants in education, 1992

Country	Average time spent	Participation rate(a)
	mins/day	%
Australia		
Males	384	9
Females	325	9
Canada		
Males	342	9
Females	330	9

(a) Proportion of the total population who undertook some education activity in the survey period.

Source: Time Use Survey; Canadian Social Trends

(six hours). This is because students' time is averaged over days when no educational activity was undertaken (e.g. weekends and school holidays) while participants' time is only averaged over those days when educational activity was actually undertaken. While the latter is the more meaningful figure, it is necessary to use average time spent by students in order to compare and contrast time use for different categories of students. Overall, there was little difference in the average time spent on education by men and women.

### Students and family status

Family status is one of the factors which affects the amount of time a person is able to spend on education. People classified as other family members represented 57% of all those classified as students. They spent the largest amount of time on education, averaging almost four hours a day. This was followed by lone parents with children under 15 years of age who represented 2% of students and averaged about three hours of education a day. Non-family members, who include people living in group households and those living alone, spent just under two and a half hours a day on educational activity. Among couples, those with children under 15 vears old spent less time on education than those without them.

Table 2

Average time spent on education by students, 1992

Relationship in household	Males	Females	Total
	mins/day	mins/day	mins/day
Husband/wife/partner with child under 15 years present	49	61	54
Husband/wife/partner without child under 15 years present	93	71	82
Lone parent with child under 15 years present	**	155	182
Lone parent without child under 15 years present	**	16*	23*
Other family member	237	235	236
Non-family member	116	164	143
All students	178	175	177

Source: Time Use Survey

# Students and labour force status

Education, like work, has a constraining effect on other activities because attendance is demanded within specific times and education is not easily carried out simultaneously with other tasks. Of persons studying full-time in May 1993, 30% also worked. The majority of these (90%) were employed part-time. Of persons studying part-time, 86% also worked and of these, 84% were employed full-time<sup>1</sup>.

The 1992 Time Use Survey found that, on average, secondary school students spent more time on education than any other group (almost five hours a day) and less time on

labour force activity (less than half an hour a day). Full-time tertiary students spent, on average, almost four hours a day on education and an hour and a half on labour force activity while part-time tertiary students spent over an hour a day on education and over four and a half hours on labour force activity. This group spent more time on education and labour force activity combined than full-time students, secondary students or non-students.

Students tend to prefer work in jobs where the hours may be flexible to accommodate their educational requirements. In addition, the amount of time students spend on education can affect the types of jobs they have. Among male students, sales persons,

Table 3

Average time spent on education and other activities, 1992

	Secondary school students		Tertiary students					
			Full-time	Full-time students		Pert-time students		Non-students
Activity	Average time	Proportion of day	Average time	Proportion of day	Average time	Proportion of day	Average time	Proportion of day
	mins/day	%	mins/day	%	mins/day	%	mins/day	%
-Education	299	20.8	232	16.1	64	4.5	3	0.2
Labour force	24	1.7	85	5.9	279	19.4	204	14.2
Household	75	5.2	120	8.4	173	12.0	238	16.5
Personal	655	45.5	622	43.2	590	41.0	624	43.4
Voluntary work and community	,							
participation	15	1.0	23	1.6	25	1.7	27	1.8
Social life and entertainment	121	8.4	127	8.8	109	7.6	98	6.8
Active leisure	77	5.3	62	4.3	60	4.2	48	3.3
Passive leisure	174	12.1	167	11.6	138	9.6	196	13.7

Source: Time Use Survey

personal service workers and labourers averaged the longest time spent on education; among female students, sales persons and personal service workers spent most time on education, followed by professionals and para-professionals.

# For more information

- How Australians Use Their Time — Selected Findings from the 1992 Time Use Survey (4153.0)
- Detailed inquiries:
   Manager,
   Time Use Survey
   (06) 252 6768
- General inquiries:
   see p. 209

# Students and other activities

As people become involved in education, the time available for other activities decreases. Students, whether secondary or tertiary, spent 22-24% of their day on education and labour force activity combined, compared to 14% spent by non-students. Most of the difference was taken up with household activity and passive leisure (watching TV, reading etc.).

On average, secondary students spent almost 11 hours a day on personal activity (mainly sleeping), nearly three hours a day on passive leisure and two hours a day on social life and entertainment. They spent equal amounts of time (about an hour and a quarter) on household activity and active leisure pursuits. Among full-time tertiary students the activity pattern was similar with almost ten and a half hours spent on personal activity, two and three-quarters on passive leisure and two hours on social life and entertainment. However, full-time tertiary students spent twice as much time on household activity as on active leisure, two hours and one hour respectively. Part-time students spent less time than other students on all non-labour force and education activities except household work and voluntary work. Apart from personal activity, non-students spent more time on household work than on any other activity.

#### **Endnotes**

Survey of Transition from Education to Work.

# Gender differences in higher education

# PARTICIPATION

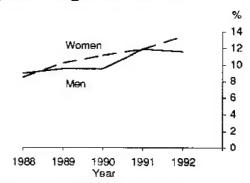
More women than men participate in higher education, While women are increasingly more likely to choose fields of study in which they have been under-represented, men continue to make traditional choices.

Gender equality in education is concerned with a desire to attain full human potential and to harness productive resources more effectively. Whether in access to and participation in higher education or in the choice of fields of study, the aim is to expand the range of possibilities open to both men and women. The evidence of recent years is that action in this area has impacted more on women than it has on men

In the past there have been strongly differentiated paths for men and women in education, both in field of study and in level of attainment. Historically, university education was limited to only those men who could afford it. However, since the first woman graduated in 1883, women's participation in higher education has steadily increased. The gap between the proportions of women and men with degrees has been closing in recent years. In 1993, 9% of women and 11% of men aged 15-69 years had a degree compared to 5% of women and 9% of men in 1984<sup>1</sup>.

Since 1989 there have been more women than men aged 15-24 years participating in

Figure 1
Proportion of persons aged 15-24
years in higher education



Source: Survey of Participation in Education

higher education. Although this is partially due to nursing courses gaining university status, there is evidence that women are continuing to increase in their participation in higher education as well as an increasing their proportion of higher education enrolments who are female.

Table 1
Higher education students by field of study(a), 1992

Field of study	Men	Women	Persons	Proportion female
	%	%	%	%
Agriculture, animal husbandry	2.7	1.2	1.9	34.1
Architecture, building	3.0	1.4	2.1	34.3
Arts, humanities and social sciences	15.6	28.7	22.6	67.9
Business, administration, economics	26.1	16.9	21.1	42.6
Education	8.3	19.2	14.1	72.7
Engineering, surveying	14.9	1.7	7.9	11.8
Health	6.6	16.9	12.1	74.5
Law, legal studies	3.7	2.8	3.3	46.5
Science	18.8	10.9	14.6	40.0
Veterinary science	0.3	0.3	0.3	54.0
Total	100.0	100.0	100.0	53.4
	'0000	'000'	,000	
Total	257.1	296.0	553.8	

(a) Excludes non-award courses.

In the Australian higher education sector, the creation of the Unified National System in 1988 led to a gradual phase-out of colleges of advanced education, institutes of technology, agricultural colleges and other institutions of a similar nature. Campuses were amalgamated and given the same recognition and funding arrangements as universities. The total number of higher education places available also increased. These moves are part of the transformation to mass higher education.

Another aspect of the transformation is concerned with equity of access to higher education for all groups in the community. In 1990 the Government developed the policy A fair chance for all: higher education that's within everyone's reach2. It defined objectives and set out national strategies '...to ensure that Australians from all groups in society have the opportunity to participate successfully in higher education. This will be achieved by changing the balance of the student population to reflect more closely the composition of society as a whole.' The report recognised the major changes that had occurred in higher education participation for women in the last decade but was still concerned with their representation within particular courses and at higher levels.

In the report a number of the objectives set were concerned with redressing the balance between men and women in higher education. Three main targets were identified: an increase in the proportion of women in non-traditional courses, other than engineering, from the current level to at least 40% by 1995; an increase in the proportion of women in engineering courses from 7% to 15% by 1995; and an increase in the number of women in post-graduate study, particularly in research, relative to the proportion of female undergraduates in each field by 1995. Strategies for achieving these targets included bridging courses, supplementary support (including careers counselling, mentor schemes, setting up networks etc.), curriculum reviews, child care, and flexibility of course arrangements. In addition, non-traditional courses and post-graduate research were to be encouraged and promoted through schools, media, community groups, professional associations and government agencies.

Between 1988 and 1992 the proportions of women enrolled in non-traditional courses increased. However, the proportion of women in every course increased, including those fields where men are not well represented such as arts, education and health. This suggests that, although there has been some movement of women into non-traditional courses, male students have continued to make conventional choices.

### Field of study

In 1992 traditional choices still dominated for both men and women in higher education.

Table 2
Proportion of higher education students who are female by field of study<sub>(a)</sub> (standardised to 1988)

Field of study	1988	1989	1990	1991	1992
	%	%	%	%	%
Agriculture, animal husbandry	31.0	31.1	31.5	30.7	32.0
Architecture, building	30.7	31.3	31.9	31.7	32.2
Arts, humanities and social sciences	66.8	66.8	66.5	65.8	65.7
Business, administration, economics	36.6	38.0	39.0	39.6	40.2
Education	70.4	71. <b>1</b>	71.0	70.8	70.7
Engineering, surveying	7.8	8.6	9.5	10.0	10.8
Health	68.7	69.8	70.8	72.1	72.6
Law, legal studies	41.7	42.6	43.5	44.0	44.1
Science	36.5	36.8	37.2	37.3	37.6
Veterinary science	49.3	50.1	50.8	50.5	51.5
Total	51.0	51.0	51.0	51.0	51.0

<sup>(</sup>a) Excludes non-award courses.

### Standardisation

Comparisons over time of the proportions of students who are female in a particular field of study or level of course are affected by the increase in the overall proportion of students in higher education who are female. This effect can be discounted by standardisation. The technique holds the proportion of students who are female constant (at the 1988 value) and applies the distribution of students by field of study or level of course for any particular year. Comparisons of the resulting proportions female show the changes in representation due to changes in course participation alone.

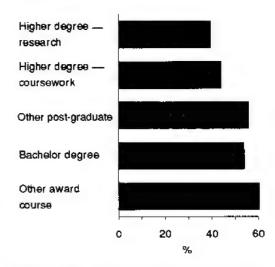
29% of female higher education students were enrolled in courses in arts, humanities and the social sciences, compared to 16% of male students. Correspondingly, 26% of male students were in business, administration and economics compared to 17% of female students. 15% of male students studied engineering or surveying compared to 2% of female students and 8% of male students studied education compared to 19% of female students.

When standardised to the proportion of female students in 1988, the data indicate that courses which have been traditionally dominated by men are gradually moving towards equal participation. In particular, the engineering/surveying field, which had 8% female participation in 1988, had increased to 11% (standardised) by 1992.

However, expanding the range of options and possibilities open to people is achieved as much by men moving into areas that were traditionally dominated by women, as it is by encouraging women into male dominated areas. Participation in those fields which

Figure 2

Proportion of higher education students who are female by level of course, 1992



Source: Department of Education, Employment and Training Selected Higher Education Statistics

women have traditionally studied, such as education, health, arts, humanities and social sciences, has not moved substantially towards equality. Rather it has remained much the same, or in the case of health, the standardised proportion of students who were female has increased<sup>3</sup>. Thus in recent years, it is largely women who have shifted not men. Achievement of greater gender equality in higher education in the future will therefore be constrained by the lack of change in male course preferences.

Table 3
Proportion of higher education students who are female by level of course(a) (standardised to 1988)

Level of course	1988	1989	1990	1991	1992
	%	%	%	% .	%
Higher degree — research	34.1	34.8	35.3	35.9	37.3
Higher degree — coursework	39.9	39.1	40.0	41.3	41.8
Other post-graduate	52.3	54.2	53.6	53.9	53.5
Bachelor degree	49.0	48.8	49.4	50.0	51.5
Other award course	65.7	66.9	65.6	64.9	58.0
Total	51.0	51.0	51.0	51.0	51.0

(a) Excludes non-award courses.

Table 4

Higher education students by level of course and field of study(a), 1992

	Women		Men		All persons in	
Field of study	Post- graduate	Under- graduate	Post- graduate	Under- graduate	higher education	
	%	%	%	%	%	1000
Agriculture, animal husbandry	4.5	29.7	10.6	55.2	100.0	10.5
Architecture, building	5.8	28.6	13.3	52.3	100.0	11.9
Arts, humanities and social sciences	9.6	58.3	5.7	26.4	100.0	125.0
Business, administration, economics	5.6	37.0	11.4	45.9	100.0	117.1
Education	22.0	50.7	10.7	16.6	100.0	78.1
Engineering, surveying	1.7	10.1	14.4	73.8	100.0	43.6
Health	9.9	64.6	5.0	20.5	100.0	67.2
Law, legal studies	8.5	38.0	11.8	41.6	100.0	18.0
Science	5.7	34.3	11.7	48.3	100.0	80.7
Veterinary science	7.0	47.0	11.7	34.3	100.0	1.7
Total	9.1	44.3	9.6	37.0	100.0	553.8

(a) Excludes non-award courses.

Source: Department of Employment, Education and training Selected Higher Education Statistics

#### Level of course

Government policy has also focused on the uneven sex balance in the upper levels of higher education participation. The lower proportions of women studying at post-graduate level have at least two implications for policy makers: the impact on women's employment opportunities and realisable income levels; and the impingement on women's participation in undergraduate courses due to fewer role models and female mentors.

The participation of women in higher education generally decreases as course levels increase. In 1992, while 55% of undergraduate students were women, this proportion reduced to 42% for higher degree students. There appear to be two major obstacles to achieving greater equality in the proportions of men and women studying at higher levels: the lack of proportional equality at lower levels in non-traditional fields of study for each sex; and the strong vocational nature of many courses traditionally undertaken by women for which a higher degree is not necessarily the most useful career move.

Since 1988 participation in higher degrees has increased for both sexes. However, the greatest change in the proportion of students who are female has been in other award courses (diploma or associate diploma level), largely as a result of the upgrading of nursing

courses from diplomas to degrees. The standardised proportion of women enrolled in other award courses has dropped significantly, from 67% in 1989 to 58% in 1992. The standardised proportions of women enrolled at all other levels have increased since 1988, with the largest increase (3 percentage points) in the proportion of women studying for higher degrees by research.

Across the fields of study, participation in higher degrees follows the traditional patterns. Of all students in each of the fields of arts, health and education, more women than men were undertaking higher degrees. However, in comparison to the sex distribution at undergraduate level, men were more likely than women to proceed to post-graduate study.

### **Endnotes**

- 1 Survey of Labour Force Status and Educational Attainment.
- 2 Department of Employment, Education and Training, NBEET (1990) A fair chance for all: higher education that's within everyone's reach.
- 3 The interpretation of trends in the male/female distribution of students enrolled in health courses is complicated by the diverse nature of courses under the general heading of health studies (e.g. medicine, dentistry, physiotherapy, nursing etc.) which are likely to exhibit quite different male/female participation rates.

# For more information

- Department of Employment, Education and Training Selected Higher Education Statistics
- Detailed inquirles: Assistant Director, Education Research Unit (06) 252 7798
- General inquiries;
   see p. 209

# People with degrees

### ATTAINMENT

in 1991, 8% of people aged 15 years and over held a degree or higher educational qualification. This was more than four times the proportion in 1971.

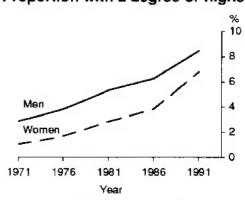
The Australian population is becoming more qualified. Between 1971 and 1991 the proportion of people with a post-school qualification increased from 20% to 39%. Over that time, the proportion of men with a degree or higher qualification rose from 3% to 8% while the proportion of women rose from 1% to 7%.

Part of the increase in the proportion of people with degrees is a consequence of the progressive upgrading to degree status of courses which were at diploma level or lower in 1971. This includes many vocationally oriented qualifications in fields such as teaching, accounting, surveying, winemaking, nursing, theatre production etc., originally provided by the former institutes of technology, teachers' colleges, colleges of advanced education and technical colleges.

Changes in the nature of qualifications provided by higher education institutions have also been associated with changes in the structure of the higher education system. In the late 1980s, higher education institutions were combined into the Unified National System with expanded enrolment capacity. The transition to mass higher education is the outcome of an international movement which links higher education directly to national economic policies. This is part of a wider

Figure 1

Proportion with a degree or higher



Source: Census of Population and Housing

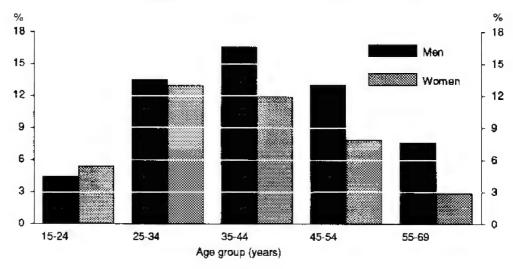
initiative to create a more highly educated labour force which will meet the needs of an economy with growth in the highly skilled occupational sectors.

#### Age and sex

The increased emphasis on higher education over the last 20 years is reflected in the proportions of people aged 25-44 years with degrees, which are higher than the proportion of those aged 45 years and over with degrees. The increase with age in the

Figure 2

Proportion of people aged 15-69 years with a degree or higher, 1993



Source: Survey of Labour Force Status and Educational Attainment

proportions of people with a degree, up to the 35-44 years age group, suggests that many people have obtained tertiary qualifications as mature age students. In 1992, 29% of people completing bachelor pass or honours degrees were aged 25 years or more and 18% were aged 30 years or more<sup>1</sup>. Increasingly, education has been seen as a life-long learning process and the higher education system as not only providing for the 17-19 years age group but also as a community resource with the flexibility and adaptability to cope with the needs of different people at different stages of their lives and careers<sup>2</sup>.

Female higher education enrolments have exceeded male since 1987, and women's increased participation in higher education (see *Gender differences in higher education* p. 90) is evident in the greater proportion of women with degrees in the 15-24 years age group. In addition, the difference between the proportions of men and women with degrees decreases with decreasing age.

### Birthplace

A higher proportion of people born overseas have a degree than do people born in Australia. This is the case for all age groups. However, there are differences between birthplace groups. In 1991, people born overseas in main English speaking countries were more likely to have a degree than those born in Australia, regardless of age. Among people born in non-English speaking countries, younger people (aged under 55 years) were more likely than the Australian

born to have a degree, and those aged 55 years and over were less likely. These differences reflect Australia's immigration history.

Many of the older people born in non-English speaking countries migrated to Australia in the post-war period up to the 1960s. They include in particular, Eastern Europeans displaced after World War II and Italian and Greek born people. Post-war immigration sought to build Australia's population and to provide a labour force for the expanding manufacturing industry. There was no specific focus on educational qualifications. More recently, however, labour shortages, many of which have been associated with professional occupations and higher levels of qualifications, have become important in the selection of immigrants.

Within the major groupings of birthplaces, considerable variations exist. As noted above, among Greek and Italian born people, many of whom have been in Australia for 20-30 years, there are low proportions of people with degrees. Among the Vietnamese born, who are part of a recent migration wave, the proportion with degrees is only slightly lower than the proportion for the Australian born. Although many would have been accepted as migrants through the refugee and humanitarian elements of Australia's migration program, the level of qualifications is also likely to have been a consideration for selection for some of them. People born in Hong Kong have been a significant component of recently arriving migrants (see Birthplaces of Australia's settlers p. 9) and

Table 1
Proportion of people aged 15 years or more with a degree or higher by birthplace, 1991

		Overseas			
Age group (years)	Australia	MESC(a)	NESC(b)	All overseas	Total
	%	%	%	%	%
15-24	4.7	7.2	7.4	7.2	5.4
25-34	13.6	16.1	22.3	19.2	15.3
35-44	14.6	17.3	18.7	18.0	15,8
45-54	10.6	13.8	11.4	12.4	11.5
55 <del>-64</del>	7.2	9.8	6.1	7.6	7.6
65 and over	7.0	7.9	6.5	7.2	7.3
Total	9.6	12.8	13.2	12.9	10.8

<sup>(</sup>a) Main English speaking countries — United Kingdom, Ireland, Canada, USA, South Africa, New Zealand.

<sup>(</sup>b) Non-English speaking countries — overseas countries excluding main English speaking countries.

Table 2
Proportion of people aged 15 years or more with a degree or higher by selected countries of birth, 1991

Age group (years)	UK & Ireland	New Zealand	Italy	Greece	Viet Nam	Hong Kong
	%	%	%	%	%	%
15-24	7.9	3.7	5.7	8.7	5.0	8.2
25-34	15.2	10.4	9.4	14.5	10.5	32.4
35-44	15.3	12.0	7.4	6.5	13.9	26.3
45-54	11.5	13.4	2.0	1.2	14.3	27.2
55-64	8.2	14.0	0.7	1.0	6.2	24.7
65+	6.8	13.5	0.9	1.3	4.0	12.7
Total	11.6	10.2	3.5	4.3	9.7	21.7

Source: Census of Population and Housing

have more than twice the proportion of people with degrees as the Australian born (22% compared to 10%). Other country of birth groups with high proportions of people with degrees include USA (45%), Philippines (41%), India (36%) and Malaysia (31%). It should be noted that these figures include overseas students undertaking post-graduate study in Australia.

### Field of study

27% of people with a degree (or higher qualification) were qualified in the field of society and culture, which includes arts, humanities, social and behavioural sciences, economics and law. Almost 20% of people with a degree or higher had education qualifications, while 9% had engineering qualifications. Over the last 20 years, there have been shifts in the fields of study in which people have obtained their degrees or

## Classifying field of study

In the 1991 Census, information was recorded only for the highest level of qualification obtained. The data therefore provide an incomplete picture of the full range of qualifications held. This is the case for people with more than one bachelor degree as well as for those with post-graduate qualifications which complement rather than extend an initial degree e.g. Graduate Diploma in Education, Master of Business Management.

higher awards, associated with the growth and decline of demand for particular occupations. More recently, the government has encouraged educational institutions to give priority to certain courses of study identified as being under-supplied in the labour force. These include computer science, environmental studies, engineering, accountancy and business studies, Asian

Figure 3
Field of study of people with degrees or higher, 1991

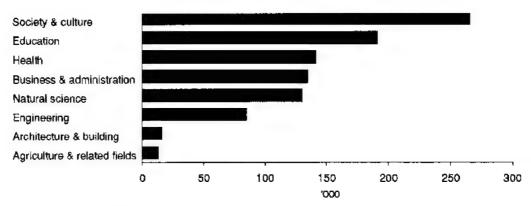


Table 3
Selected fields of study by year qualification attained, 1991

Field of Study	Pre-1971	1971-80	1981-87	1988- <del>9</del> 1	Total
	%	%	%	%	,000
Business and administration	11.9	11.6	14.2	16.8	135.1
Sales and marketing	0.2	0.5	1.1	1.7	8.6
Accounting	9.4	7.0	7.4	7.8	77.2
Education	12.6	21.6	21.2	19.2	191.5
Society and culture	24.1	26.8	26.6	29.1	266.3
Behavioural studies	4.3	6.4	6.2	7.3	61.0
Economics	4.2	4.1	3.0	3.3	35.8
Law	5.1	4.2	3.7	3.0	39.3
Natural science	12.0	13.0	13.4	13.8	130.5
Environmental science	0.1	0.3	0.5	0.7	3.9
Physical science	5.2	3.8	3.1	2.6	35.7
Computer science	0.2	1.6	3.4	3.9	23.6
Engineering	11.5	9.1	8.0	5.9	85.2
	1000	'000	'000	'000	'000
All persons with degree or higher	191.5	279.2	304.6	206.3	996.7

Source: Census of Population and Housing

studies, and teacher education in mathematics, science and foreign languages.

Those fields of study which have increased their share of qualifications at degree level or higher include education, sales and marketing, behavioural studies, environmental science and computer science. In the case of education, the last 20 years has seen the upgrading of primary and pre-primary teaching qualifications to degree status with opportunities provided for diploma level qualifications to be converted to degrees.

One of the fastest growing fields of study is computer science. Of people who graduated before 1971, less than half a percent held computer science qualifications. Of those graduating at degree level or higher between 1988 and 1991, 4% had obtained computer science qualifications, more than graduated in either economics or law. While environmental science has been one of the faster growing fields of study, this growth has been from a low base and in 1991 less than 4,000 people (0.4% of those with degrees) were qualified in that field.

Those fields of study with a declining share of total graduates over the past 20 years include economics, law, engineering, and the

physical sciences (which includes physics and chemistry). In the case of economics it is possible, particularly during the 1980s, that people qualified in the related area of commerce.

Associated with the trend towards higher level qualifications has been a trend towards the possession of more than one qualification often in different fields. However, no information is available from the population census to address this in any detail.

#### Small area concentrations

Higher levels of education are generally associated with professional occupations and higher incomes. It is therefore not surprising to observe that those areas with the highest concentration of people with degrees generally correspond to the higher socio-economic areas of the capital cities. Those areas adjacent to universities are also evident, for example, St Lucia in Queensland, Nedlands in Western Australia and Turner in the Australian Capital Territory.

The Australian Capital Territory has the highest proportion of people with degrees of all States and Territories, and the highest small area concentrations of people with degrees in the country. This reflects the

Table 4

Areas<sub>(a)</sub> with highest proportion of people with degrees or higher, 1991

Aleas(a) With	mgnesi	proportion or beob	ne with t	degrees or nigher,	ו פפו
	%		%		%
New South Wales	11.7	South Australia	9.2	Northern Territory	11.4
North Sydney	33.8	Adelaide	27.0	City — Inner	23.2
Woollahra	33.8	Burnside	24.8	Larrakeyah	22.1
Mosman	32.5	Kensington & Norwo	od 23.3	South Alligator	20.9
Sydney	32.3	Walkerville	23.3	Fannie Bay	18.0
Ku-ring-gai	30.8	St Peters	23.0	Jabiru	17.0
Victoria	12.3	Western Australia	10.3	Aust. Capital Territory	23.5
Hawthorn	31.3	Subiaco	33.7	Forrest	46.7
Kew	30.5	Nedlands	32.1	Tumer	46.0
Fitzroy	30.4	Peppermint Grove	31.4	Campbell	41.4
Melbourne	29.5	Cottesloe	29.8	Aranda	40.2
Prahran	29.3	Claremont	25.8	Deakin	39.4
Queensland	9.1	Tasmania	9.1	Australia	11.2
Taringa	33.6	Hobart	22.6		
St Lucia	33.1	Kingborough	15.4		
Chapel Hill	31.4	Port Cygnet	10.0		
Brookfield	30.5	Beaconsfield	9.4		
Indooroopilly	29.6	Launceston	8.8		

<sup>(</sup>a) Statistical Local Areas (SLAs) in Queensland, Australian Capital Territory and Northern Territory, Local Government Authorities (LGAs) in all other States.

Source: Census of Population and Housing

# For more information

- 1991 Census —
   Community Profiles,
   Australia (2722.0)
- Detailed inquirles: Assistant Director, Education Research Unit (06) 252 7798
- General inquiries:
   see p. 209

different structure of its labour force. In 1991, 22% of employed people in the Australian Capital Territory were in professional occupations compared to 13% of all employed people.

In Tasmania the distribution of people with degrees is particularly highly skewed with only four Local Government Authority areas (LGAs) having proportions of people with degrees above the State average. The LGAs of Hobart, Kingborough, Port Cygnet and Beaconsfield contain 45% of the people with degrees but only 21% of the population.

### **Endnotes**

- 1 Department of Employment, Education and Training Higher Education Statistics.
- Higher Education Council (1990) Higher education: the challenges ahead.

# Work

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PAID EMPLOYMENT	
Trends in part-time work	103
Much of the job growth in recent years has been in part-time work. In 1993 just under a quarter of all employed persons were working part-time.	
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Trends in trade union membership	109
Trade union membership is declining, partly due to the changing nature of employment.	·
UNEMPLOYMENT	
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Rising unemployment since 1973 has seen a rise in the incidence of long-term unemployment. Older men have been particularly affected by this trend.	
UNPAID WORK	
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In 1992, on average, women spent twice as many of their waking hours as men on unpaid household work but half as many on labour force activity.	
NOT IN THE LABOUR FORCE	
Early retirement among men	126
Increasing numbers of older men are retiring from full-time work early, half of them because of ill health.	

# Work — national summary

LABOUR FORCE	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total labour force	'000	6 954	7 068	7 199	7 451	7 679	7 867	8 083	8 346	8 491	8 518	8 574
Participation rate	%	60.6	60.5	60.5	61.4	62.0	62.2	62.6	63.5	63.6	63.0	62.6
Male participation rate	%	76.5	76,5	75.9	75.9	75.6	75.3	75.2	75.5	75.4	74.4	73.9
Female participation rate	%	44.6	45.0	45.7	47.4	48.7	49.4	50.4	51.9	52.3	51.9	51.7
Women (of labour force)	%	37.4	37.7	38.3	39.1	39.8	40.3	40.8	41.4	41.7	41.9	41.9
PAID EMPLOYMENT	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total employed	'000	6 329	6 388	6 579	6 860	7 044	7 256	7 549	7 832	7 782	7 637	7 634
Part-time employed (of total employed)	%	17.2	17.3	17.7	18.3	19.2	19.8	20.1	20.9	21.7	22.9	23.5
Employment/population ratio	%	55.2	54.7	55.3	56.6	56.9	57.4	58.5	59.6	58.3	56.5	55.8
Employed in service industries (of employed)	%	22.8	23.5	24.0	23.9	24.5	24.6	24.8	24.9	25.6	27.1	27.1
Employed in manufacturing industries (of employed)	%	18.4	17.8	17.5	16.7	16,2	16.2	16.1	15.5	14.9	14.4	14.5
Part-time employed who want more hours (of part-time employed)	%	19.1	19.4	17.7	16.9	18.4	18.8	17.6	18.0	21.7	26.4	29.2
Average hours worked per week by full-time workers	hours	38.2	38.7	38.8	39.1	39.7	39.7	39.7	39.8	39.9	40.6	40.3
Average weekly hours of paid overtime per employee	hours	1.2	1.1	1.2	1.2	1.3	1.4	1.5	1.3	1.1	1.1	1.2
INDUSTRIAL RELATIONS	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Trade unionisation rate	%	n.a.	n.a.	n.a.	45.6	n.a.	41.6	n.a.	40.5	n.a.	39.6	n.a.
Working days lost due to industrial disputes per 1,000 employees	days	249	248	228	242	223	269	190	217	265	158	108
UNEMPLOYMENT	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total unemployed	000	624.9	680.1	619.4	591.5	635.1	610.5	534.6	513.7	709.0	881.7	940.5
Long-term unemployed	000	127.2	202.7	192.5	172.1	176.8	169.1	145.6	116.4	149.5	255.7	336.3
Unemployment rate	%	9.0	9.6	8.6	7.9	8.3	7,8	6.6	6.2	8.4	10.4	11.0
Youth unemployment rate	%	21.5	23.3	21.3	19.9	20.3	18.9	15.7	14.9	20.0	23.8	24.5
Youth unemployment/population ratio	%	13.2	14.1	12.8	12.1	12.3	11.2	9.4	9.1	11.7	13.3	13.5
Median duration of unemployment	weeks	15.3	22.9	21.6	19.9	18.9	18.1	16.4	12.7	14.4	23.8	27.8
NOT IN LABOUR FORCE	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
												_

Reference periods:

All data are annual averages for the year ending 30th June except for average weekly hours of paid overtime per employee, trade unionisation rate, working days lost due to industrial disputes per 1,000 employees, and discouraged jobseekers.

## Work — State summary

LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT_	ACT	Aust.
Total labour force	000	1992-93	2 867.0	2 187.8	1 512.5	713.4	831.3	218.3	83.2	161.1	8 574.4
Participation rate	%	1992-93	61.3	62.5	63.8	61.7	64.8	60.1	69.9	72.8	62.6
Male participation rate	%	1992-93	72.6	74.0	75.1	72.8	76.1	71.9	75.6	80.5	73.9
Female participation rate	%	1992-93	50.4	51.5	52.7	51.0	53.6	48.8	62.8	65.5	51.7
Women (of labour force)	%	1992-93	41.8	42.1	41.8	42.1	41.5	41.2	43.3	46.2	41.9
PAID EMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total employed	000	1992-93	2 555.3	1 931.2	1 352.8	631.5	746.2	191.8	76.3	148.9	7 633.9
Part-time employed (of total employed)	%	1992-93	22.1	23.7	24 0	26.3	24.8	26.3	19.5	23.1	23.5
Employment/population ratio	%	1992-93	54.6	55.2	57.0	54.6	58.2	52.8	64.1	62.3	55.8
Employed in service industries (of employed)	%	1992-93	26.7	25.5	27.2	30.1	27.4	29.9	34.9	32.7	27.1
Employed in manufacturing industries (of employed)	%	1992-93	14.8	18.1	12.1	15.4	11.0	12.6	4.9	3.6	14.5
Part-time employed who want more hours (of part-time employed)	%	1992-93	27.8	29.9	30.6	31.5	28.0	27.7	24.8	26.3	29.2
Average hours worked per week by full-time workers	hours	1992-93	40.5	39.7	41.3	40.4	40.6	38.6	39.8	38.9	40.3
Average weekly hours of paid overtime per employee	hours	1992-93	1.3	1.2	1.1	1.0	1.2	1.0	*1.5	8.0	1.2
INDUSTRIAL RELATIONS	Units	Years	NSW	Vic.	Old	SA	WA	Tas.	NT	ACT	Aust.
Trade unionisation rate	%	1992	37.9	41.4	38.1	44.3	37.0	50.5	36.5	39.8	39.6
Working days lost due to industrial disputes per 1,000 employees	days	1993	89	169	134	53	51	29	37	77	108
UNEMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total unemployed	'000	1992-93	311.7	256.6	159.7	81.8	85.1	26.5	6.9	12.2	940.5
Long-term unemployed	'000	1992-93	112.7	100.9	46.6	33.8	26.3	11.3	1.6	3.1	336.3
Unemployment rate	%	1992-93	10.9	11.7	10.6	11.5	10.2	12.1	8.3	7.6	11.0
Youth unemployment rate	%	1992-93	23.2	27.2	23.0	26.7	22.7	26.9	21.3	25.7	24.5
Youth unemployment/population	%	1992-93	12.4	13.9	13.9	15.1	13.8	15.1	9.8	15.4	13.5
Median duration of unemployment	weeks	1992-93	28.2	32.7	21.9	34.6	22.3	35.3	15.8	19.6	27.8
NOT IN LABOUR FORCE	Units	Years	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust
	000	1993	47.5	41.7	24.0	11.2	17.0	3.7	*1.2	1.1	147.4

### Work — definitions and references

Average hours worked per week by full-time workers — average hours worked, including overtime, by full-time workers (as defined) during the survey reference week. The hours are those stated by survey respondents and are not necessarily the hours paid for.

Reference: The Labour Force, Australia (6203.0)

- Average weekly hours paid overtime per employee total overtime hours paid for divided by the total number of employees (as defined), including those who were not paid for any overtime. Overtime is time worked in excess of award, standard or agreed hours of work for which payment is received. Figures are the annual average of quarterly figures. Reference: Job Vacancies and Overtime, Australia (6354.0)
- Discouraged jobseekers people who wanted to work and who were available to start work within four weeks but whose main reason for not taking active steps to find work was that they believed they would not be able to find a job for reasons of: age; language or ethnicity; schooling; training; skills or experience; no jobs in their locality or line of work; or they considered that there were no jobs at all available. Reference: Persons Not in the Labour Force, Australia (6220.0)
- Employed persons aged 15 years and over who worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.

Reference: The Labour Force, Australia (6203.0)

- Employees employed persons (as defined) who work for wages or salary in the reference period.

  Reference: The Labour Force, Australia (6203.0)
- Employment/population ratio the number of employed persons (as defined) in a group expressed as a proportion of the civilian population in the same group.

Reference: The Labour Force, Australia (6203.0)

Full-time workers — employed persons (as defined) who usually worked 35 hours a week or more and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Reference: The Labour Force, Australia (6203.0)

Labour force — all persons aged 15 years and over who, during the reference week, were employed or unemployed (as defined).

Reference: The Labour Force, Australia (6203.0)

- Long-term unemployed people unemployed (as defined) for 52 weeks or longer.
- Reference: The Labour Force, Australia (6203.0)

  Annufacturing industries the manufacturing divis
- **Manufacturing industries** the manufacturing division of the *Australian Standard Industrial Classification* (1201.0).

Reference: The Labour Force, Australia (6203.0)

- Median duration of unemployment the period of unemployment at which half of the unemployed (as defined) had been unemployed for more weeks and half had been unemployed for fewer weeks.

  Reference: The Labour Force, Australia (6203.0)
- Participation rate for any group, the labour force (as defined) expressed as a percentage of the civilian population in the same group.
  Reference: The Labour Force, Australia (6203.0)

Part-time employed — employed persons (as defined) who usually worked less than 35 hours a week and who did so during the reference week.

Reference: The Labour Force, Australia (6203.0)

- Part-time employed who want more hours part-time employed (as defined) who indicated they would prefer to work more hours.

  Reference: The Labour Force, Australia (6203.0)
- Service industries the combination of the following divisions of the *Australian Standard Industrial Classification*: wholesale and retail trade; transport and storage; communication; finance, property and business services; public administration and defence; community services; and recreation, personal and other services.

Reference: The Labour Force, Australia (6203.0)

Trade unionisation rate — the number of employees (as defined) with membership in a trade union in connection with their main job divided by total employees.

Reference: Trade Union Members, Australia (6325.0)

- Unemployed persons aged 15 years and over who were not employed (as defined) during the reference week, but who had actively looked for work and were available to start work.

  Reference: The Labour Porce, Australia (6203.0)
- Unemployment/population ratio the number of unemployed persons (as defined) in any group, expressed as a proportion of the civilian population in the same group.

  Reference: The Labour Force, Australia (6203.0)
- Unemployment rate the number unemployed (as defined) expressed as a proportion of the labour force (as defined). Separate rates may be calculated for sub-groups of the population.

  Reference: The Labour Force, Australia (6203.0)
- Working days lost due to industrial disputes total working days lost by employees (as defined) due to industrial disputes during the year.

  Reference: Industrial Disputes, Australia (6322.0)

Youth — aged 15-19 years.

# Trends in part-time work

### PAID EMPLOYMENT

Much of the job growth in recent years has been in part-time work. In 1993 just under a quarter of all employed persons were working part-time. One of the most important developments in the labour market in recent years has been the substantial growth in part-time work. Total employment grew by 1.8 million or 32% between 1973 and 1993. Just over one million of the new jobs were part-time, representing an increase in part-time employment of 164% over the 20-year period. The number of people working full-time grew by nearly three-quarters of a million, an increase of 14%.

The relatively rapid growth of part-time work in comparison to the growth of full-time work has led to a substantial increase in the proportion of the employed working part-time. In 1973, 12% of all workers were part-time, by 1983 the proportion had reached 17%, and in 1993 it was 24%.

This trend presents challenges in terms of policy making which has, in many areas, traditionally been based on a model of full-time working arrangements. Industrial relations (see *Trends in trade union membership*, p. 109), social security and family welfare are just some of the broad areas in which part-time work has become an important issue. Research also suggests that the proportion of new jobs that are part-time has an important effect on the impact that overall employment growth has on reducing measured unemployment.

#### Part-time work

Part-time workers are defined by the ABS as employed persons who usually work less than 35 hours in a week and who did so during the reference week.

Prior to 1986 figures do not include unpaid family helpers working less than 15 hours a week. No adjustments have been made for this break in the series. The effect should only be small, however.

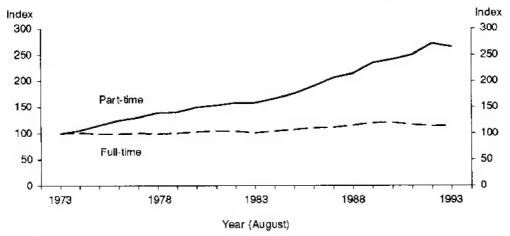
Both the demand and supply side of the labour market have influenced the growth in part-time work.

### Industry

High growth in the service industries is one of the most often cited factors associated with the growth in demand for part-time workers. Part-time workers tend to be highly concentrated in the service industries, reflecting the cost advantages of part-time labour in these areas.

In 1993, 79% of all part-time workers were employed in just 4 of the 12 major industry groupings and all of these were service industries: wholesale and retail trade (28%); community services (26%); recreation, personal and other services (14%); and

Figure 1 Index(a) of trends in part-time and full-time employment



(a) Base year 1973=100. Source: Labour Force Survey finance, property and business services (10%). It is precisely these industries which have experienced the greatest employment growth over the last two decades.

In 1973 manufacturing was the largest industry grouping in terms of employment, followed by wholesale and retail trade, community services, construction, and agriculture, forestry, fishing and hunting. By 1993 the largest employer had become wholesale and retail trade, followed by community services. Manufacturing had slipped to third, while construction and agriculture were replaced as the fourth and fifth largest employers by finance, property and business services, and recreation, personal and other services.

Although part-time employment growth was greatest in service industries such as wholesale and retail trade, community services etc., increases were recorded in all of

the 12 major industrial categories. In construction the proportion increased almost four-fold between 1973 and 1993, from 4% to 16%, and in public administration the proportion almost trebled from 4% to 12%.

In the service industries the increase in the proportion of people working part-time was largely due to employment growth in part-time work outstripping employment growth in full-time work. However, in agriculture, forestry, fishing and hunting; electricity, gas and water; manufacturing; construction; and communications, growth in part-time employment was accentuated by declines in full-time employment.

The specific reasons for strong growth in part-time work vary according to the industry in question. Nevertheless, some of the more general developments likely to have had an effect in a number of areas include:

Figure 2

Labour force participation rate profiles

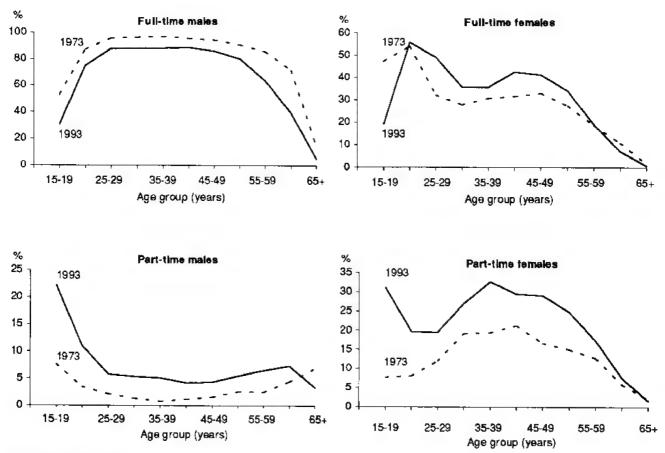


Table 1

Trends in part-time employment by industry

	Full-time employment		Part-time employment		Total employment		Change 1973-93		
Industry	1973	1993	1973	1993	1973	1993	Part-time	Full-time	Total
	000	,000	'000	000	'000	'000'	,000	'000	'000
Agriculture, forestry, fishing and hunting	375.8	320.4	50.4	86.8	426.1	407.2	36.4	-55.4	-18.9
Mining	67.7	86.9	1.8	3.1	69.5	90.0	1.3	19.2	20.5
Manufacturing	1 313.8	962.4	68.5	111.5	1 382.3	1 073.9	43.0	-351.4	-308.4
Electricity, gas and water	98.4	93.2	* *	1.7	99.0	94.8	**	-5.2	-4.2
Construction	481.9	465.9	21.3	87.9	503.2	553.8	66.6	-16.0	50.6
Wholesale and retail trade	992.9	1 073.7	194.2	516.0	1 187.1	1 589.7	321.8	80.8	402.6
Transport and storage	294.0	324.1	18.5	41.4	312.4	365.5	22.9	30.1	53.1
Communication	120.4	102.7	5.8	11.6	126.2	114.4	5.8	-17.7	-11.8
Finance, property and business services	350.0	662.4	51.2	190.7	401.3	853.1	139.5	312.4	451.8
Public administration and defence	219.1	344.8	8.9	44.9	228.0	389.7	36.0	125.7	161.7
Community services	550.0	1 011.8	142.4	465.8	692.4	1 477.6	323.4	461.8	785.2
Recreation, personal and other services	229.0	352.2	126.5	259.0	355.6	611.2	132.5	123.2	255.6
Total	5 092.9	5 800.5	690.1	1 820.5	5 783.0	7 621.0	1 130.4	707.6	1 838.0

Source: Labour Force Survey

- the introduction of extended working hours. This has particularly affected the retail industry following the relaxation of trading hour restrictions, but also banking, restaurants, pubs and clubs, and many other service providers;
- the introduction of new technology. The technology which has had the greatest impact in this respect is information and data processing. In many areas this technology has led to a complete reorganisation of work. Areas affected include finance, property and business services (including banking administration), other clerical work in a number of industries, and retailing;
- an increased demand by employers for flexibility under more competitive conditions. In many areas there are peak demand periods for services through the day, week or year. Under such conditions part-time labour may prove more flexible and as such may also be more cost effective:
- changed award conditions which allowed part-time work on a permanent basis.

### Occupation

As might be expected given industry concentrations, part-time workers are also concentrated in a narrow range of occupations. In 1993, the proportion of

part-time workers was above the average of 24% in 15 out of 52 occupation groups. These same occupation groups accounted for close to three-quarters of all part-time workers. The 15 largest occupation groups in terms of full-time employment accounted for about half of all full-time workers.

Cleaners had the highest proportion of people working part-time at 63%. Other occupations with more than 50% working part-time in 1993 were miscellaneous salespersons (a group which includes bar attendants, waiters and waitresses), tellers, cashiers and ticket salespersons, and sales assistants.

In 1993, sales assistants accounted for 14% of all part-time workers and was the largest occupation group in terms of the overall number of people working part-time. The next largest occupation group was miscellaneous labourers and related workers which accounted for 9% of all part-time workers. This group includes storemen, kitchenhands and hospital ward helpers.

### **Demographic characteristics**

The majority of part-time workers (75% in 1993) are women and the increasing participation of women in the labour force has been one of the major factors on the

Table 2
Selected occupations, 1993

Occupation (minor group)	% of occupation group part-time	% of all part-time workers
	%	%
Cleaners	63.3	7.1
Miscellaneous salespersons	59.6	6.0
Tellers, cashiers and ticket salespersons	59.3	4.6
Sales assistants	51.4	13.9
Personal service workers	48.9	4.1
Miscellaneous labourers and related workers	42.5	9.3
Other teachers and instructors	43.7	2.6
Registered nurses	40.4	3.6
Receptionists, telephonists and messengers	34.0	3.9
Numerical clerks	33.4	8.4
Stenographers and typists	31.2	4.0
Agricultural labourers and related workers	29.7	2.2
Filing, sorting and copying clerks	27.1	0.9
Miscellaneous clerks	26.4	1.6
Miscellaneous professionals	24.5	0.7

Source: Labour Force Survey

supply side of the labour market associated with the increase in part-time employment. The female labour force participation rate increased 10 percentage points between 1973 and 1993, rising from 41% to 51%. Over 90% of the increase was due to an increase in participation in the part-time labour market.

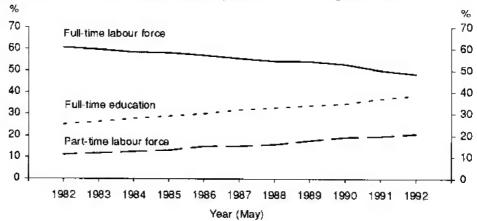
Increasingly women are combining work with family responsibilities and part-time work provides an important means of achieving this. In 1993 the incidence of part-time work was highest among married women at 47% compared to 35% for unmarried women. The incidence of part-time work among men in 1993 was 10%.

Students are another important source of part-time labour and the increase in participation in education among 15-24 year olds, particularly through the 1980s, has been another important trend contributing to an increase in the supply of potential part-time workers (see *Education – national summary table* p. 80). Participation in full-time education among 15-24 year olds increased from 25% to 38% between 1982 and 1992. Over the same period participation in the full-time labour force by 15-24 year olds declined, from 61% to 48%, while participation in the part-time labour force increased, from 11% to 21%.

About 40% of the overall increase in participation in the part-time labour force between 1973 and 1993 was due to increased participation by 15-24 year olds, a large proportion of whom are students.

Figure 3

Education and labour force participation of 15–24 year olds



Source: Labour Force Survey; Survey of Transition from Education to Work

One other group which requires special mention with respect to part-time work is older male workers, particularly those in retirement. Although men in the 55-64 year age range represented only a little over 3% of the total part-time labour force in 1993, 12% of those who were working, worked part-time, compared to 6% of men aged 25-54 years. This partly reflects the use of part-time work as a means of easing into retirement (see *Early retirement among men* p. 126).

## Part-time work and unemployment

The fact that such a large proportion of the pool of people working or wishing to work part-time are married women and students impacts on the relationship between employment growth and unemployment. A number of researchers have argued that among these particular groups a large proportion are likely to have been outside the labour force prior to obtaining a job. Similarly, if married women or students lose their part-time jobs they are likely to leave the labour force, rather than enter the pool of unemployed for any extended period. In essence this means that many of the participants in the part-time labour market effectively bypass the unemployment pool upon entering or exiting the labour force.

This has critical implications for the way in which job growth affects measured unemployment. As the mix of new jobs changes, with more jobs being part-time, the effect of overall job growth on measured unemployment is diminished. This partly

explains why at the present time Australia has a high unemployment rate despite many years of high overall employment growth.

Some support for this argument can be found in the fact that increases in part-time work have corresponded with increases in participation in the labour force by women, particularly married women, and students. Some support can also be found in the fact that in 1992, 67% of people outside the labour force who wanted to work said they would prefer a part-time job. Moreover, 64% of discouraged jobseekers i.e. people who had left the labour force because they could not find a job, also said they would prefer part-time work. At the same time only 14% of the people who were unemployed said they were looking for part-time rather than full-time work.

### Underemployment

The majority of people working part-time do so by choice. Nevertheless, with the growth in unemployment in recent years the number of people working part-time who would prefer more hours has been increasing, as has the number of full-time workers forced to work part-time hours because of lack of work. Combined, these two groups of workers comprise the underemployed.

In 1993, 580,000 people were underemployed, a slight decline from the previous year. The underemployment rate (underemployed expressed as a percentage of the labour force) was 7%. About 12% of the underemployed were full-time workers stood down or on short time because of insufficient

Figure 4
Underemployment and unemployment rates

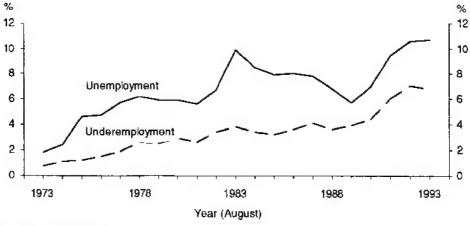


Table 3

Total and underemployed part-time workers, August 1993

# For more information

- The Labour Force, Australia (6203.0)
- Transition from Education to Work, Australia (6227.0)
- Underemployed Workers, Australia (6265.0)
- Persons Not in the Labour Force, Australia (6220.0)
- Detailed inquiries: Assistant Director, Labour Force Estimates (06) 252 6565
- General inquiries: see p. 209

	Total pa	rt-time worke	ors	Underemployed part-time workers			
Age group (years)	Males	Females	Persons	Males	Females	Persons	
	'000	'000	'000	,000	0000	'000	
15-19	123.6	168.8	292.4	46.2	47.4	93.6	
20-24	71.6	129.1	200.8	34.3	55.9	90.2	
25-34	71.9	303.2	375.1	43.3	69.8	113.1	
35-44	58,5	397.6	456.1	32.7	78.7	111.3	
45-54	47.2	264.9	312.1	23.4	55.2	78.7	
55 and over	76.5	107.6	184.1	15.7	9.8	25.5	
Total	449.3	1 371.1	1 820.5	195.6	316.8	512.4	

Source: Labour Force Survey

work. The remainder, just over half a million, were part-time workers. Of these, 186,000 (36%) had actively looked for full-time work in the four weeks prior to the survey.

The half million underemployed part-time workers represented 28% of all part-time workers in 1993. 62% of underemployed part-time workers were women compared to 75% of all part-time workers. The highest incidence of underemployment among male part-time workers was in the 25-34 years age group of whom 60% wanted to work more hours. The highest incidence of

underemployment among women was 43% in the 20-24 years age group. Overall, 44% of male part-time workers were underemployed compared to 23% of female part-time workers.

### **Endnotes**

1 See for example Lewis, H. (1990) Part-time Work: Trends and Issues and Gregory, R.G. (1990) Jobs and Gender: a Lego Approach to the Australian Labour Market Discussion Paper No. 244, Centre for Economic Policy Research, Australian National University.

## Trends in trade union membership

### INDUSTRIAL RELATIONS

Trade union
membership is
declining, partly
due to the changing
nature of
employment.

Between 1986 and 1992 trade union membership declined by 6 percentage points from 46% of employees to 40%1. Similar trends were evident in a number of OECD countries2 including, for example, the USA and UK, and can, at least partly, be explained by compositional changes resulting from patterns of job growth and job loss which have occurred in employment. Job growth was generally greater in those segments of the labour force with relatively low levels of trade union membership e.g. service industries, while job losses tended to be concentrated among the more highly unionised segments of the labour force such as manufacturing, particularly in the most recent recession.

The tendency for people to belong to trade unions is related to their age, their sex and their employment characteristics, especially the industry and sector (public/private) in which they are employed, their job status (part-time/full-time, casual/permanent), their occupation, and the size of their employment location. Patterns of job growth and job loss in the 1986-92 period affected all of these. Except for changes in the age structure of employees, all of these changes had a negative impact on overall trade union membership rates.

## Changes in industry composition

Trade union membership rates vary considerably across different industries. The highest rates occur in industries such as electricity, gas and water, communication, and public administration and defence which have high public sector employment. Manufacturing, construction and community

Table 1

Trends in trade union membership

Year	Total employees	Trade union members	Unionisation rate
	'000'	'000	%
1986	5 683.4	2 593.9	45.6
1988	6 101.9	2 535.9	41.6
1990	6 565.6	2 659.6	40.5
1992	6 334.8	2 508.8	39.6

Source: Survey of Trade Union Members

### Data sources

ABS has been publishing annual statistics derived from membership returns submitted by trade unions since 1917 (Trade Union Statistics (6323.0)). In 1976 ABS began collecting trade union membership data in conjunction with labour force surveys. This collection, published in Trade Union Members (6325.0) and conducted in 1976, 1982, 1986, 1988, 1990 and 1992, is the one used in this review. It provides better statistics on trade union membership than those obtained from the trade unions themselves whose membership returns may include people who belong to more than one union and people who are no longer financial members. The reference period of this review is restricted to 1986-92 when all definitions and classifications used in the surveys were consistent.

services all exhibit moderately high rates of trade union membership. Service industries such as wholesale and retail trade, and recreation, personal and other services, and rural industries exhibit relatively low rates of trade union membership.

Much of the growth in the number of employees between 1986 and 1992 was concentrated in the least unionised industries. Recreation and personal services grew by 45%, finance, property and business services by 28%, wholesale and retail trade by 18%, and agriculture, forestry, fishing and hunting by 13%. In contrast, most of the employment loss occurred in highly unionised industries. Electricity, gas and water declined by 23%, and communication by 21%.

Community services was the only industry with a relatively high trade union membership rate to exhibit sufficient job growth over the 1986-92 period to boost its share of total employment. However, over half of this growth was in the private sector which has a relatively low rate of trade union membership. The high rate of trade union membership in the industry as a whole reflects the high rate of membership in the larger public sector component of the industry which also grew, but at a slower rate.

Between 1986 and 1992 the proportion of employees working in industries with higher than average unionisation rates fell from 62% to 58%. Over the same period there was also

Table 2 Industry and sector of employees

	1986		1992		
Industry/sector	Employees	Unionisation rate	Employees	Unionisation rate	
	%	%	%	%	
Industry					
Agriculture, forestry, fishing and hunting	2.0	14.6	2.1	12.6	
Mining	1.6	71.5	1.3	57.6	
Manufacturing	18.7	51.2	16.2	44.4	
Electricity, gas and water	2.4	82.4	1.7	77.2	
Construction	5.3	48.0	4.6	42.4	
Wholesale and retail trade	19.4	25.4	20.5	22.3	
Transport and storage	5.5	67.4	4.6	58.8	
Communication	2.6	80.4	1.8	77.1	
Finance, property and business services	10.1	33.6	11.6	28.4	
Public administration and defence	5.8	60.4	5.5	60.7	
Community services	20.5	52.4	22.3	49.9	
Recreation, personal and other services	6.0	28.5	7.8	21.8	
Total	100.0	45.6	100.0	39,6	
Public sector	30.8	70.6	27.1	67.1	
Private sector	69.2	34.5	72.9	29.4	

Source: Survey of Trade Union Members

a shift of 4 percentage points in the proportion of employees in the highly unionised public sector to the private sector, which generally has much lower levels of trade union membership. This was related to the changes in gross industry structure and also incorporated some shifts within industries such as that in community services.

## Growth of permanent part-time and casual work

Trade union membership rates are highest among permanent full-time employees. In 1992, 47% belonged to a trade union compared to 41% of permanent part-time employees and 17% of casual employees.

Some 75% of the job growth between 1986 and 1992 was in part-time work both permanent and casual (see *Trends in part-*

Table 3
Employment status of employees

	1986		1992		
Employment status	Employees	Unionisation rate	Employees	Unionisation rate	
	%	%	%	%	
Permanent full-time employees	76.6	51.5	69.5	46.6	
Casual full-time employees	5.3	22.4	6.6	17.1	
Permanent part-time employees	6.1	42.0	8.1	40.8	
Casual part-time employees	11.9	20.4	15.7	17.3	
Total	100.0	45.6	100.0	39.6	

Source: Survey of Trade Union Members

time work p. 103). Of the 650,000 jobs created over the period, 319,000 (49%) were casual part-time positions, 167,000 (26%) were permanent part-time positions and 115,000 (18%) were casual full-time positions. Although the number of permanent full-time positions also grew, their share of total employment fell by 7 percentage points.

Increases in permanent part-time work and casual work between 1986 and 1992 occurred in most industries and were not just associated with the pattern of industry change. However, there is a concentration of permanent part-time and casual workers in the high growth industries. In such industries growth in permanent part-time and casual work exceeded growth in permanent full-time work. In industries where employment declined or growth was slow, compositional change was effected through smaller increases in permanent part-time and casual work offset by real declines in permanent full-time work.

## Change in the mix of occupations

In 1992 managers and administrators had the lowest rates of trade union membership, followed by salespersons and personal service workers, and clerks. The other 'white collar' occupation groups, professionals and para-professionals, had relatively high rates of trade union membership. At 44%, trade union membership among professionals was as high as among labourers and related workers, the largest 'blue collar' occupation

group. Trade union membership among para-professionals (54%) was second highest of all major occupation groups after plant and machine operators, and drivers.

Between 1986 and 1992 employment in professional and para-professional occupations grew by 26% and 14% respectively. However, any positive effect of this growth on aggregate trade union membership rates was most likely offset by even stronger growth in managerial and administrative occupations (29%) and sales and personal service occupations (28%), which have the lowest rates of trade union membership. Added to this there were real declines in the numbers employed in the highly unionised occupation groups of tradespersons, and plant and machine operators, and drivers.

### Size of location

Size of employment location has a strong correlation with trade union membership rates, particularly in the private sector. In 1992, 13% of employees in private sector employment locations of less than 10 employees were trade union members. In comparison, locations in the private sector with more than 100 employees had a trade unionisation rate of 51%.

Size of location has only been recorded in the Survey of Trade Union Members since 1990 so an examination of changing patterns of employment concentration over time is not possible from this source. However, some data are available from the Business Register

Table 4
Occupation of employees

	1986		1992		
Occupation group	Employees	Unionisation rate	Employees	Unionisation rate	
	%	%	%	%	
Managers and administrators	6.1	22.5	7.1	18.3	
Professionals	12.8	46.8	14.5	43.5	
Para-professionals	6.8	58.9	7.0	54.3	
Tradespersons	16.0	51.9	13.7	45.8	
Clerks	19.1	36.4	18.2	31.7	
Salespersons and personal service workers	14.3	31.4	16.4	27.4	
Plant and machine operators, and drivers	8.1	70.1	7.2	65.0	
Labourers and related workers	16.8	52.6	16.0	43.7	
Total	100.0	45.6	100.0	39.6	

Source: Survey of Trade Union Members

Table 5
Sector and location size of employees

	1986	1992		
Sector and location size	Employees(a)	Employees(a)	Unionisation rate(b)	
	%	%	%	
Private sector				
Less than 10 employees	26.1	27.0	12.6	
10-19 employees	8.6	9.7	22.2	
20-99 employees	17.3	19.5	35.2	
100 or more employees	21.2	20.5	50.7	
Public sector				
Less than 10 employees	1.5	1.2	50.2	
10-19 employees	1.6	1.4	68.7	
20-99 employees	6.4	6.4	72.2	
100 or more employees	17.4	14.4	65.7	
Total	100.0	100.0	39.6	

<sup>(</sup>a) These estimates are derived from the Business Register and are not strictly comparable with figures derived from the Survey of Trade Union Members.

Sources: Survey of Trade Union Members; Business Register

which, although not strictly comparable, provide an indication of the relevant trends.

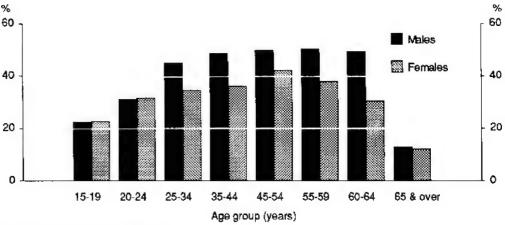
Between 1986 and 1992 private sector growth was higher in smaller employment locations which have lower than average trade unionisation rates. Although public sector employment increased in absolute terms, it declined in terms of share of total employment with the largest loss of share occurring in large locations.

### Sex and age structure

Trade union membership rates show marked variation by age and sex. In 1992, 35% of female employees were members of trade unions compared to 43% of male employees. Similarly younger employees had lower rates of trade union membership than older employees, 23% of those aged 15-19 years compared to 46% of those aged 45-59 years. It is not clear whether this pattern is related specifically to age or sex or to the fact that

Figure 1

Trade union membership rates, 1992



Source: Survey of Trade Union Members

<sup>(</sup>b) Union membership rates by size of location were not collected in 1986.

women and younger workers tend to be concentrated in lowly unionised industries and occupations, and in part-time and casual jobs.

The increases in the employment share of women between 1986 and 1992 may have had some negative effect on aggregate trade unionisation levels while the decrease in employment share of younger workers may have had a positive effect.

## Total effect of compositional change

One method of quantifying the effects of compositional change on trade union membership is to recalculate aggregate rates while holding compositional elements constant. The resulting standardised estimates can then be compared to the actual rates to gain some idea of the effect that might be attributed to the change in composition<sup>3</sup>.

Results indicate that, individually, the changes in job status, industry and sectoral composition of the labour force accounted for about a quarter of the decline in trade union membership between 1986 and 1992. Changes in occupation mix and size of employment location each accounted for 10-11% of the decline. The increase in the proportion of female employees had only a small effect on trade union membership accounting for 5% of the decline. Age structure change on its own had the only positive effect on trade union membership rates.

It should be noted that these effects are not additive due to the fact that the various categories are not mutually exclusive and strong correlations exist between the variables. This problem could be eliminated by holding all relevant variables constant simultaneously but the data do not allow sufficient disaggregation for this. However, it

Table 6

Factor standardised(a) trade union membership rate

Factor	1992 rate(a)	Proportion of union membership decline explained by factor
	%	%
Industry	41.1	25
Sector	41.0	24
Job status	41.2	26
Occupation	40.3	11
Size of location(b)	40.2	10
Sex	39.9	5
Age	38.9	-11
Unstandardised	39.6	4.4

- (a) Standardised to 1986 composition for each factor.
- (b) Estimates concerning compositional change in terms of size of location were derived from the Business Register.

Source: Survey of Trade Union Members

seems likely that if all variables were taken into account, well over 30% of the decline in trade union membership could be explained by compositional change<sup>4</sup>.

### **Endnotes**

- 1 All data used in this review with the exception of part of Table 5 are derived from the Survey of Trade Union Members and refer to employees in main job.
- 2 OECD (1991) Employment Outlook.
- 3 This type of standardisation is generally referred to as shift share analysis.
- 4 Other earlier research on this issue indicates that around 50% of the decline is due to compositional change, see Peetz, D. (1990) Declining Union Density The Journal of Industrial Relations Vol. 32.

## For more information

- Trade Union Members, Australia (6325.0)
- Detailed inquiries: Assistant Director, Labour Force Supplementary Surveys (06) 252 6504
- General inquiries: see p. 209

### Long-term unemployment

### UNEMPLOYMENT

Along with rising unemployment rates in the last 20 years, there has been a coinciding rise in the long-term unemployed. Older men have been particularly affected by this trend.

The continued existence of long-term unemployment and the difficulty experienced by the long-term unemployed in obtaining employment have significant economic and social consequences. The lower escape rate from unemployment of the long-term unemployed can result from a loss of skills and on-the-job training, a reduced intensity of job search, and a reluctance by employers to hire the long-term unemployed<sup>1</sup>.

Long-term unemployment in Australia reached an unprecedented peak of 366,000 persons in March 1993, representing 38% of the unemployed and 4% of the labour force. The previous peak of 231,000 persons (31% of total unemployment) occurred in February 1984.

### Trends in unemployment

Between 1966 and 1972 the unemployment rate averaged less than 2%. This was followed by a period of rapid and sustained increases in unemployment between 1973 and 1981, when the unemployment rate rose from 2% to 6%. The prolonged unemployment growth over this period saw long-term unemployment emerge as a new and permanent feature of the Australian labour market. Between August 1973 and August 1981, the number of long-term unemployed

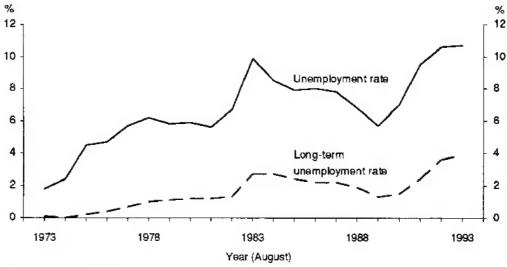
### Unemployment

The unemployed are persons aged 15 years and over who were without work during the reference week, but were currently available for work, and actively looking for work. The long-term unemployed are persons who have been unemployed for 52 weeks or more. The definition excludes discouraged jobseekers and others marginally attached to the labour force. As a result, statistics of long-term unemployment may understate the severity of the problem for persons who experience prolonged periods without employment. The (long-term) unemployment rate is the number of (long-term) unemployed in any group expressed as a percentage of the labour force in that same group. The incidence of long-term unemployment is the proportion of unemployed persons who are long-term unemployed.

increased from 4,000 to 80,000 and the incidence of long-term unemployment increased from 4% to 21%.

The severe labour market downturn of 1982-83 worsened the unemployment situation. Initially, the incidence of long-term unemployment fell as rising inflows to unemployment increased the proportion of short-term unemployed. However, by August 1983, the incidence of long-term unemployment had risen to 28% as previous

Figure 1
Unemployment and long-term unemployment rates



inflows moved into long-term unemployment, and the inflow to unemployment slowed. Between August 1982 and August 1983, the number of long-term unemployed more than doubled, from 88,000 to 189,000.

The economic recovery in the second half of 1983 was the beginning of a long period of strong employment growth. Employment grew by almost 1.6 million between August 1983 and August 1990, representing an average annual growth rate of 3%. In spite of this strong employment growth, long-term unemployment, and to a lesser extent total unemployment, continued at high levels until 1988. Between August 1983 and August 1988, employment grew by 1.1 million, yet the number of long-term unemployed fell by only 36,000 to 153,000.

Women, particularly those aged 35-44 years, benefited most from the strong employment growth. The labour force participation rate of women in this age group rose from 57% to 71% between August 1983 and August 1990 and the number employed increased by 337,000 (62%). This represented 22% of the total employment growth in the period. However, much of the employment growth was in part-time and casual work (see *Trends in part-time work* p. 103).

Between August 1989 and August 1993, the number of long-term unemployed more than trebled, from 108,000 to 334,500, and peaked at 366,000 in March 1993. In contrast to the rapid recovery after the 1982-83 recession, unemployment remained virtually unchanged over the two years following the trough of the 1990-91 recession.

### International comparison



In 1991, Australia's long-term unemployment rate (2%) and incidence of long-term unemployment (25%) were in the mid-range relative to the selected countries and were comparable to those of New Zealand and the United Kingdom. Australia's position relative to other countries has not changed much since 1979 as the long-term unemployment rate and the incidence of long-term unemployment increased in most countries between 1979 and 1991.

Caution should be exercised when making international comparisons of statistics of long-term unemployment due to the differences that exist in the methodology of collection, concepts, definitions, coverage etc. For example, statistics for Greece and Italy are based on persons aged 14 years and over; for Australia, Canada, France, Japan and New Zealand on persons aged 15 years and over; for USA on persons aged 16 years and over; for Sweden on persons aged 16-64 years; and for UK on males aged 16-69 years and females aged 16-64 years.

### Selected OECD countries, 1991

Country	Unemploy- ment rate		Long-term unemployment Incidence
	%	%	%
Australia	9,6	2.4	24.9
Canada	10.3	0.7	7.2
France	9.4	3.5	37.2
Greece	8.2	3.9	47.0
Italy	11.0	7.4	67.1
Japan	2.1	0.4	17.9
NZ	10.3	2.2	21.3
Sweden	2.7	0.1	4.6
UK	8.3	2.3	28.1
USA	6.7	0.4	6.3

Source: OECD Employment Outlook, July 1993

Figure 2 incidence of long-term unemployment

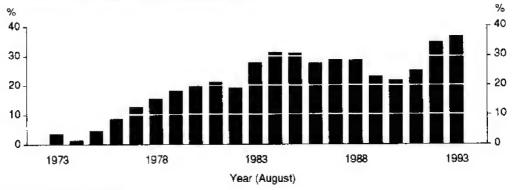


Table 1

Age and sex distribution of unemployment, August 1993

	Males			Females			
Age group Uner (years) rate	Unemployment rate	Long-term unemployment rate	Long-term unemployment incidence	Unemployment rate	Long-term unemployment rate	Long-term unemployment incidence	
	%	%	%	%	%	%	
15-19	24.0	4.2*	17.5*	21,9	3.6*	16.6*	
20-24	18.1	6.3	35.0	13.7	5.2	37.8	
25-34	11.0	4.2	38.0	9.1	2.6	28.8	
35-44	7.9	3.2	40.5	7.6	2.6	34,5	
45-54	7.2	4.1	55.9	6.5	2.9	44.4	
55-64	13.8	8.5*	61.2*	5.5*	2.4*	43.8*	
65 & over	1.5*	0.7*	50.0*	* *	* *	* *	
Total	11.4	4.5	39.5	9.8	3.1	31.8	

Source: Labour Force Survey

### Age and sex

In August 1993, 67% of the long-term unemployed were male, compared to their labour force share of 58%. Men had both a higher long-term unemployment rate (4%) and incidence of long-term unemployment (39%) than women (3% and 32% respectively).

Long-term unemployment has been consistently higher for men than for women since August 1983. The difference between them increased in the two years following the 1982-83 recession, and again in the two years following the 1990-91 recession. This is due in part to women being more likely than men to leave the labour force if experiencing unemployment. In addition part-time employment, which is mainly female, was largely unaffected by the recession. As a result, the incidence of female long-term unemployment is generally lower than that of men.

A major difference in the age distributions of male and female long-term unemployed is the over-representation of older men. Those aged 55 years and over accounted for 16% of all long-term unemployed men, compared to their labour force share of 10%. The difference between the long-term unemployment rates of men and women was smallest for those aged 15-19 years and 35-44 years. In contrast, the long-term unemployment rate of men aged 55-64 years was considerably higher than of women of the same age, mainly reflecting the low labour force participation rate of older women.

The high incidence of long-term unemployment observed among older men largely reflects their relatively strong labour force attachment combined with a possible skills mismatch as a result of industry restructuring, and the diminishing number of employment opportunities available to them. As a result, once they become unemployed, the likelihood of them being unemployed long-term is substantial.

### Regional comparison

Significant regional differences exist in unemployment and long-term unemployment rates, partially reflecting differing economic structures and policy approaches to unemployment, the impact of seasonal employment, and concentrations of particular industries in certain areas<sup>2</sup>.

In August 1993, Tasmania and Victoria had the highest long-term unemployment rates (both 5%). In contrast the Northern Territory and the Australian Capital Territory had long-term unemployment rates of less than 2%, well below the national average of 4%. The higher long-term unemployment figures recorded for Tasmania and Victoria can be attributed to the decline in economic growth in the manufacturing industry in those States during the late 1980s. The lower figure recorded for the Australian Capital Territory was related to the high proportion of public sector employment and to growth in the service industries, particularly finance. The Northern Territory's low figure is attributable to particularly high growth in the mining industry and sustained growth in wholesale and retail trade.

Table 2
Unemployment, August 1993

State/ Territory	Unemployment rate	Long-term unemployment rate
	%	%
NSW	10.5	3.8
Vic.	12.2	5.2
Qld	10.5	3.3
SA	10.0	4.0
WA	9.0	2.6
Tas.	13.2	5.4
NT	7.7	1.6
ACT	6.9	1.7
Australia	10.7	3.9

Source: Labour Force Survey

### **Birthplace**

Birthplace is widely regarded as exercising an important influence on the likelihood of being employed. Differences between birthplace groups emerge for a number of reasons including discrimination, lack of familiarity with English as a spoken and written language, and lack of familiarity with Australian social customs<sup>2</sup>.

In August 1993, people born in non-English speaking countries had a much higher long-term unemployment rate (7%) than people born in Australia and people born in other main English speaking countries (both 3%). The long-term unemployment rates for migrants from Lebanon (20%) and Viet Nam (17%) were by far the highest of any country of birth group with a significant contribution

to the Australian labour force. This would seem to be a result of the high proportions of refugee arrivals from these two countries<sup>3</sup>.

The concentration of unemployed migrants in older age groups is a factor in their higher incidence of long-term unemployment (41% in August 1993 compared to 34% for people born in Australia). Over the last ten years, migrants born in non-English speaking countries have consistently had the highest long-term unemployment rates, while migrants born in main English speaking countries generally experienced similar long-term unemployment rates to people born in Australia.

Recently arrived migrants had much higher unemployment and long-term unemployment rates than longer-term residents, but these rates are likely to decrease as their period of residence increases. However, migrants who arrived since the onset of the 1990-91 recession, especially those born in non-English speaking countries, had extremely high unemployment and long-term unemployment rates in August 1993.

### **Educational attainment**

Higher levels of educational attainment are associated with lower unemployment and long-term unemployment rates. In February 1993, people who had not completed the highest level of secondary school had the highest unemployment rate (15%) and long-term unemployment rate (6%) of any other educational attainment group. In comparison, people with degrees or higher qualifications had by far the lowest

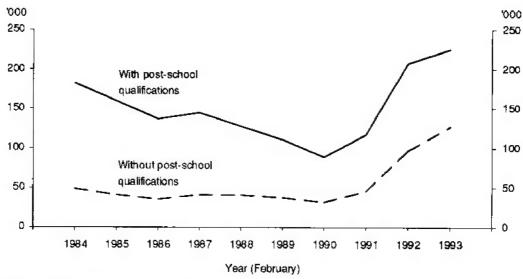
Table 3
Unemployment and the overseas born, August 1993

Born in main English speaking countries(a)				Born In non-Eng	gilsh speaking co	ountries
Period of arrival	Unemployment rate	Long-term unemployment rate	Long-term unemployment incidence	Unemployment rate	Long-term unemployment rate	Long-term unemployment incidence
	%	%	%	%	%	%
Before 1971	9.3	3.9	41.8	11.4	5.8	50.6
1971-80	7.9	1.7	21.4	13.8	5.6	40.8
1981-90	9.6	2.7	28.0	19.0	8.8	46.4
1991-August 1993	13.4	1.1	8.0	45.1	17.9	39.6
Total	9.2	2.9	31.3	16.0	7.3	45.6

(a) Comprises United Kingdom, Ireland, Canada, South Africa, USA and New Zealand.

Figure 3

Long-term unemployed persons and educational attainment



Source: Survey of Labour Force Status and Educational Attainment

unemployment rate (6%) and long-term unemployment rate (2%).

Between 1984 and 1990, the number of long-term unemployed people with post-school qualifications remained fairly steady, ranging between 31,000 and 49,000 while the number without post-school qualifications declined from 182,000 to 89,000. This does not imply, however, that people without qualifications were more likely to find work (or to leave the labour force) than those with qualifications. Rather the change coincided with a general increase in levels of educational attainment. People may therefore have obtained qualifications and found jobs.

More recently, long-term unemployment has affected those with post-school qualifications more severely than those without. The number of long-term unemployed without post-school qualifications almost trebled between February 1990 and February 1993, while the number with post-school qualifications quadrupled.

### Family structure

76% of the long-term unemployed in August 1993 were members of families. Of these, 38% were married with dependants, 22% were married without dependants and 6% were lone parents. The remaining 34% were other family members, mainly young adult

children. This distribution has remained relatively constant over the last eight years.

Married people without dependants had the lowest unemployment rate (6%) and the lowest long-term unemployment rate (3%) of any family status group. Lone parents had the highest long-term unemployment rate (7%), and the second highest unemployment rate (17%).

In August 1993, 506,000 family members, including 248,000 dependant children, were

Table 4
Family status, August 1993

Unemploy- ment rate	Long-term unemployment rate
%	%
7.7	3.1
6.5	2.8
16.8	6.6
17.2	5.3
13.4	5.7
15.7	5.0
10.7	3.9
	7.7 6.5 16.8 17.2 13.4 15.7

living with the 334,500 long-term unemployed family members.

### Occupation

The preferred occupation of an unemployed person may reflect their skills, training, capabilities, or previous employment background. In July 1992, 52% of all unemployed persons had a preferred occupation, compared to 46% of the long-term unemployed. This difference may reflect an increased lack of specific or perceived skills among the long-term unemployed, but may also reflect disillusionment and a willingness to accept jobs in non-preferred fields. Of those long-term unemployed with a preferred occupation, 28% would have preferred to work as labourers and related workers, 19% as tradespersons, and 18% as salespersons and personal service workers. These occupations each represented 15% of employed persons in August 1992.

## For more information

- Australia's Long-term Unemployed: A Statistical Profile (6255.0)
- Detailed inquiries:
   Assistant Director,
   Labour Statistics
   Analysis Unit
   (06) 252 6325
- General inquiries:
   see p. 209

### Endnotes

- 1 Chapman, B.J. (1993) Long-Term Unemployment: the Dimensions of the Problem The Australian Economic Review: 2nd Quarter 1993.
- 2 Inglis, P.A. and Volker, P.A. (1985) Unemployment in Australia - an Overview of Some Issues The Structure and Duration of Unemployment — Proceedings of a Conference, Bureau of Labour Market Research.
- 3 Iredale, R. and D'Arcy, B. (1992) The Continuing Struggle: refugees in the Australian Labour Market Bureau of Immigration Research.

# Unpaid household work

### UNPAID WORK

in 1992, on
average, women
spent twice as
many of their
waking hours as
men on unpaid
household work but
haif as many on
labour force
activity.

Unpaid work is a major category of activity in Australian households. In the course of a year Australians spend almost 18 billion hours on unpaid work, compared to 16 billion hours on paid work.

Given that a large part of the day is generally spent sleeping (on average 8-8.5 hours), for most Australians, decisions about their use of time pertain to what should be done during waking hours. In 1992, unpaid household work occupied a substantial proportion (an average of 31%) of women's waking hours. The combination of paid and unpaid work with voluntary and community activities occupied almost half their time (47%). While 16% of men's waking hours was devoted to unpaid work, the total of paid and unpaid work, and voluntary and community activities occupied the same proportion of their waking hours as women.

Time spent on eating and personal care (washing, dressing and grooming etc.) has much the same obligatory character as time spent on sleep. Time spent in education might be considered time which, like paid work, is contractually committed. This leaves on average just over one-third (36% for both men and women) of waking hours available as discretionary or free time for leisure pursuits.

Neither income, education nor occupation have a significant effect on the amount of unpaid work an individual does. Rather,

Table 1

Proportion of waking hours spent on main groups of activities, 1992

Activity	Men	Women
	%	%
Labour force	28.6	13.4
Unpaid household work	15.9	30.9
Eating and personal needs	12.9	13.6
Community participation(a)	2.7	2.8
Education	3.5	3.1
Social and leisure	36.3	36.1
Total waking hours	100.0	100.0

(a) Includes voluntary work.

Source: Time Use Survey

### Paid and unpaid work

Work is generally defined as activity that uses labour and other factors of production to produce goods and services for sale in the market. Unpaid work receives no payment as the majority of the services are not produced for the market. As a result there are no appropriate monetary prices to use in the valuation of these services. Accordingly, the 1993 System of National Accounts (SNA) excludes the value of unpaid work from its definition of economic production as it aims to measure only market activity and activity for which satisfactory near market values exist.

Data on the time spent on unpaid work are collected through time use surveys where respondents keep a diary record of every activity undertaken in the course of a day. In this review unpaid household work includes the following household activities:

- food preparation and clean up;
- cleaning and tidying;
- laundry, ironing and clothes care;
- purchasing goods and services;
- physical care of own and other children;
- playing with, teaching, minding children;
- garden, pool and pet care;
- home maintenance and car care;
- household management;
- travel associated with the above activities;
- transporting household members.

In measuring unpaid work by the time spent on each activity no account is taken of the productivity of the time used or of the quality of output achieved. Nevertheless, the data can be used to produce estimates of the value of unpaid work within a national accounting framework. Such estimates are being prepared for 1992 by the ABS. Once data are available from another time use survey, they should provide a basis for producing satellite accounts which will enlarge the boundary of economic production. Generally, the unpaid assistance provided by relatives and others in family businesses is grouped with (paid) labour force activities.

there is a general trade-off between hours of paid work and the amount of time devoted to unpaid work for both men and women.

In contrast to many other activities, a substantial amount of unpaid household work occurs while individuals are engaged in another (primary) activity. This is most evident in child care/minding. When this accompanying (secondary) activity is taken into account, the average time Australians spend caring for, or minding, children increases from 32 minutes a day to 2 hours

11 minutes a day, a four-fold increase. Including the component of secondary activity time that accompanies leisure and personal care when estimating annual hours of unpaid work in Australia adds a further 5.4 billion hours a year and increases the estimate of total time spent in unpaid work by about 30%.

### Segregation of unpaid work

Much of the discussion of sex discrimination has revolved around the assignment of social roles by gender. Legislation such as the Sex Discrimination Act 1984 and the Affirmative Action (Equal Opportunity for Women) Act 1986 has sought to ensure and promote the rights of women to participate equally in all areas of Australian society.

Nevertheless, the assignment of unpaid work tasks remains stereotyped and there is little evidence of rapid short-term change<sup>1</sup>. Most unpaid tasks around the house appear to be classified as either men's work or women's work. Australian women, on the whole, are responsible for indoor housework such as cooking, laundry, cleaning and the physical care of children, while men are responsible for the outdoor tasks like lawn, garden, pool and pet care, and for maintaining the home and the car. Shopping and playing with children are the activities most likely to be gender neutral, although in both cases women spend more time on these activities than men.

The extent of segregation in unpaid work activities can be measured using an equality

ratio. In 1992 women spent twice as much time as men on unpaid work. Women worked eight and half times longer than men on laundry, ironing and clothes care, more than five times longer on the physical care of children, between four and five times longer on cleaning, and three times longer on cooking. On the other hand, men spent five times as much time on home maintenance and car care.

While these comparisons indicate a high degree of segregation, it is important to remember that men's high commitment to paid work greatly reduces their time available for unpaid work. However, even when this reduced availability is taken into account a distinct segregation continues to be evident. For example, laundry occupied 3% of men's average unpaid household work time and 13% of women's. Laundry, physical care of children, cleaning and cooking were disproportionally female activities while garden, pool and pet care, home maintenance and car care were male activities. Shopping and playing with children were the tasks most likely to be shared.

Patterns of time use also vary considerably depending on age, family and life-cycle status, and labour force status. Both the total amount of unpaid work and the allocation to different activities are affected.

### The transition to marriage

The effect of marriage on time spent on selected household tasks can be illustrated by comparing time spent by people living with

Table 2

Average weekly time spent on selected unpaid household work activities, 1992

Activity	Men		Women		Equality ratio(a)
4.00	hours	%	hours	%	no.
Laundry, ironing and clothes care	0.5	3.1	4.0	13.1	8.5
Physical care of own children	0.6	3.8	3.0	10.0	5.2
Cleaning	1.1	6.9	4.9	16.2	4.7
Food preparation and clean up	2.8	18.3	8.3	27.3	3.0
Shopping	4.1	26.7	6.4	21.2	1.6
Playing with own children	0.5	3.1	0.7	2.3	1.5
Garden, pool and pet care	3.5	22.9	2.6	8.5	0.7
Home maintenance and car care	2.3	15.7	0.5	1.5	0.2
Total	15.3	100.0	30.3	100.0	2.0

<sup>(</sup>a) Ratio of average time spent by women on an activity to the average time spent by men.

Source: Time Use Survey

Table 3

Average weekly time spent on selected unpaid work activities. 1992

Life-cycle stage	Laundry	Cleaning	Cooking	Total
	hours	hours	hours	hours
Women				
Married, under 45 years, no children	3.0	4.1	6.3	13.4
Under 60 years, living alone	1.9	3.5	4.5	9.9
Daughter, living with parents	0.7	1.8	2.6	5,1
Men				
Married, under 45 years, no children	0.3	1.2	2.6	4.1
Under 60 years, living alone	1.1	1.9	4.9	7.9
Son, living with parents	0.2	0.9	1.1	2.2

Source: Time Use Survey

parents or living alone with the average time spent by younger married couples, who have not yet had children,

There are substantial differences in the time spent on unpaid work activities between the groups, most obvious in the low times spent by adult children living with their parents. Even in this category young men spent less than half as much time as young women on cooking, cleaning and laundry. These findings are consistent with the notion that girls are socialised to accept a greater role in unpaid household work than boys and that parents (mainly mothers) continue to undertake a substantial amount of the housework generated by their young adult children.

For people living alone, marriage has opposite effects for men and women. For men cooking, cleaning and laundry time are all reduced by marriage, whereas for women they all increase. Compared to a single woman, marriage increases cooking time by 40%, laundry by 56% and cleaning by 11%.

### The effect of children

In 1992 the amount of unpaid household work time of mothers of pre-school age children was more than double that of married women who had not had children. Mothers of infant children (0-1 years) spent over 59 hours a week in unpaid work. Unpaid household work time decreased as the age of the youngest child increased. For older married women whose children have left home (who form the majority of women aged over 45 years, without children), time spent on unpaid household work was still 40% greater than that of younger married

women who had not yet had children. However, it is to be expected that time spent on paid work would be greater for younger married women without children than for the older group.

Although the figures only include the time spent in primary child care, mothers of infant children spent over 30 hours a week on child care, regardless of time spent shopping,

### Life-cycle stages

Individuals pass through a variety of life-cycle stages in the course of a lifetime. Transition through life-cycle stages involves movements between distinct social states e.g. when an individual moves from being a child living with parents to independence, the formation of a partnership, parenthood, retirement, widowhood etc. The sequence of these stages is not rigid, neither can the stages be arranged in any order.

The life-cycle stages considered are:

- son or daughter living at home with parents;
- sharing with unrelated others;
- living alone but under retirement age:
- married, under 45 years, without children;
- married with children

youngest child aged 0-1 years youngest child aged 2-4 years youngest child aged 5-9 years youngest child aged 10-14 years youngest child aged 15 years or over;

- lone parent
  - youngest child aged 0-14 years youngest child aged 15 years or over;
- married, over 45 years, without children;
- married, above retirement age;
- living alone, above retirement age.

In this categorisation, retirement age is taken as 65 years for men and 60 years for women, married includes de facto, and the presence or absence of children refers to children living at home with their parent(s).

Table 4

Effect of children on average weekly time spent on unpaid household work activities, 1992

	Married men				Married women			
Life-cycle stage	Shopping	Child care	Domestic	Total(a)	Shopping	Child care	Domestic	Total(a)
	hours	hours	hours	hours	hours	hours	hours	hours
Under 45 years, no children	4.3	0.1	11.0	15.4	6.2	0.5	17.7	24.4
Age of youngest child								
0-1 years	3.3	8.2	11.0	22.4	5.6	30.5	23.2	59.3
2-4 years	3.3	6.3	11.4	20.9	7.2	17.9	26.4	51.3
5-9 years	3.0	3.6	11.7	18.2	5.7	11.7	26.4	43.6
10-14 years	3.3	2.3	12.3	17.9	6.7	5.6	25.9	38.2
15 years and over	4.3	0.1	15.2	19.6	6.7	0.6	29.2	36.4
Over 45 years, no children	4.6	0.6	15.4	20.4	5.6	1.2	27.0	34.1

(a) includes cooking, cleaning, laundry, home management and maintenance, gardening, transporting family members etc.

Source: Time Use Survey

preparing meals and cleaning and tidying. There is a clear relationship between the age of the youngest child and the time spent on child care. The younger the child, the greater the demand on the mother's time. Time spent on domestic activities (cooking, cleaning, laundry, gardening, home maintenance, car and pet care, paper work, transport and travel) generally increased with the age of the youngest child, while shopping time remained fairly constant.

Fathers of infants did 45% more unpaid household work than young married men without children, including about 8 hours a week in direct child care as a primary activity. Mothers of infants spent two and a half times more time than fathers on unpaid household work but their labour force activity was substantially less than that of fathers of young children. For fathers this stage of the life-cycle represents a heavy commitment to long hours of paid work.

### The effect of widowhood

Older retired women living alone did 24% less unpaid work than women above retirement age living with a male partner. Most of this reduction occurred in cooking and laundry. The time released by this reduction was chiefly devoted to extra social life and entertainment.

For men, on the other hand, the loss of a partner leads to substantial increases in unpaid work. Time spent on laundry trebled

while time spent cleaning and cooking more than doubled.

### The double burden

With the increasing participation of married women in the paid labour force, the question arises as to how they combine paid and unpaid work and whether they carry a double burden.

In order to assess the extent to which other family members increase their hours of unpaid work in support of married women's labour force activity, the average amount of unpaid work of husbands and adult children has been examined for different categories of women's hours of paid work. While some fluctuations are evident, in general there is a

Table 5

Average time spent per week on selected activities, 1992

Life-cycle stage	Laundry	Cleaning	Cooking
	hours	hours	hours
Men over 65 years			
Married	0.5	1.6	4.6
Living alone	1.5	3.9	9.3
Women over 60 years			
Married	4.2	6.2	12.6
Living alone	3.2	6.4	9.0

Source: Time Use Survey

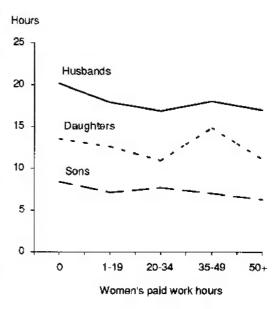
slight trend downwards suggesting that, on average, the amount of unpaid work of other family members tends to decrease rather than increase as women's paid work increases. The one exception is in the move from part-time to full-time work when both husbands and daughters increased their unpaid work hours. On the other hand, sons did more unpaid work when their mothers worked part-time. On average, husbands' unpaid work time was 50% greater than daughters' living at home and 100% greater than sons' living at home.

When all other relevant factors, such as life-cycle stage, the presence of children and the age of the youngest child, are held constant, a wife's hours of paid employment have only a weak effect on her husband's weekly hours of unpaid work. Everything else being equal, the husband of a woman moving from no employment to long hours of full-time employment (over 50 hours a week) would undertake an extra three and a quarter hours of unpaid work a week. Men's own hours of paid work and the presence of pre-school age children have the most influence on husbands' hours of unpaid work.

A move into the labour force does not mean that the hours of paid employment can simply be added to the domestic load of women who are not in the labour force. While the total paid and unpaid work of these women is higher than that of a full-time housewife, there is a reduction in the amount of unpaid work done. When all other factors such as age, income, numbers of children and age of youngest child are held constant, there is a significant reduction in the time devoted

Figure 1

Contribution of family members aged 15 years and over to unpaid household work, 1992



Source: Time Use Survey

to unpaid work. The rate of this reduction for cooking, laundry and cleaning, all other things being equal, is estimated at about five and a half hours a week for a woman working 40 hours a week. However, this reduction is not because others in the household have increased their amount of unpaid household work substantially to compensate. Rather, some of the work is either not being done or

Table 6
Average weekly time spent on selected activities by full-time employed married couples with children, 1992

Activity	Men		Womer	1	Equality ratio(a)
	hours	%	haurs	%	no.
Laundry, ironing and clothes care	0.4	2.2	3.6	11.1	10.3
Physical care of own children	3.0	19.3	9.5	29.0	3.1
Cleaning	0.8	5.2	4.1	12.5	5.0
Food preparation and clean up	2.5	15.5	7.6	23.3	3.1
Shopping	3.0	19.3	4.9	15.1	1.6
Playing with own children	0.9	5.9	1.3	3.9	1.4
Garden, pool and pet care	2.6	16.3	1.2	3.6	0.5
Home maintenance and car care	2.6	16.3	0.5	1,4	0.2
Total	15.8	100.0	32.6	100.0	2.1

(a) Ratio of average time spent by women on an activity to the average time spent by men.

Source: Time Use Survey

## For more information

- How Australians Use Their Time – Selected Findings from the 1992 Time Use Survey, Australia (4153.0)
- Detailed inquiries: Manager, Time Use Survey (06) 252 6768
- General inquiries: see p. 209

market substitutes have been made, for example with child care, cleaning, ironing, meals out etc.

As well as the reduction in the amount of unpaid household work that takes place when married women enter into full-time employment, there is a question of whether the allocation of tasks changes. When the segregation of unpaid work tasks is examined for full-time employed married couples with children under 15 years, a similar pattern is observed as in the population as a whole, although men spent more time in the physical care of their own children. It would appear that women's move into the full-time labour force has not impacted greatly on role

stereotypes in the allocation of unpaid work tasks. Again part of the explanation for the extent of segregation observed relates to the constraint on time availability imposed by men's paid work commitments. Even among full-time workers, Time Use Survey data indicate that married men with children spent 52% more time on full-time paid work than did their full-time employed wives (51 hours a week compared to 33 hours a week).

### **Endnotes**

1 Bittman M. (1992) Juggling Time — How Australian Families Use Time AGPS, Camberra.

# Early retirement among men

### NOT IN THE LABOUR FORCE

Increasing numbers
of older men are
retiring from
full-time work early,
half of them
because of iii
health.

Over the last 20 years there has been a trend towards early retirement evidenced by the decline in full-time labour force participation among older men. Between 1973 and 1993 participation of men aged 55-64 years in the full-time labour force declined from 79% to 52%. As might be expected declines were greater for the 60-64 years age group than for the 55-59 years age group. In 1973, the majority (72%) of men aged 60-64 years worked full-time. By 1983 less than half (38%) worked full-time. Since then the rate has remained much the same.

In association with this decline in full-time labour force participation of older men there has been an increase in those working part-time, particularly in the 10 years to 1993. While part-time participation rates for men aged 55-64 years were low relative to full-time participation rates (7% compared to 52%) there appears to be an increased tendency for some men, particularly those aged 60-64 years, to ease into retirement through a period of part-time employment prior to leaving the labour force permanently. As a consequence of their increased participation in the part-time labour force, the proportion of men aged 60-64 years who were not in the labour force

### Retirement and early retirement

The standard retirement age, defined on the basis of age pension eligibility, is currently 65 years for men and 60 years for women. *Early retirement* is defined as retirement from the full-time labour force before the standard retirement age.

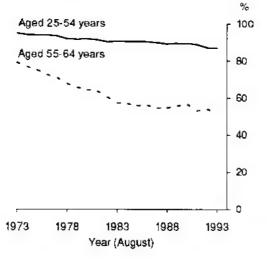
The Retirement and Retirement Intentions Survey defines retired people as those aged 45 years and over who have ceased full-time work and who do not intend to work or to look for work on a full-time basis in the future. Early retirement is examined in this review mainly in terms of men aged 55-64 years who are not in the full-time labour force.

fell between 1983 and 1993, from 57% to 53%.

Some of the factors which have influenced these changes in labour force participation of the pre-retirement age group include the deterioration in labour market prospects for older workers (see *Long-term unemployment* p. 114), increased availability and attractiveness of non-labour sources of income such as government pensions and superannuation (see *Retirement income* p. 143), and changed attitudes in general to work and leisure.

Figure 1

Male full-time labour force participation rate



Source: Labour Force Survey

Table 1

Male labour force participation

Age group (years)	Full-time	Part-time	Not in the labour force
	%	%	%
1973			
25-54	95.1	1.3	3.3
55-59	85.9	2.4	11.7
60-64	71.6	4.4	23.9
1983			
25-54	90.8	3.2	6.0
55-59	73.8	4.4	21.7
60-64	38.2	4.6	57.2
1993			
25-54	86.9	5.0	8.0
55-59	63.8	6.5	29.8
60-64	39.3	7.3	53.4

Table 2

Retired men by age retired

Age group at	Aged 55 years and over				
retirement (years)	1983	1992			
	%	%			
55-59	17.5	24.4			
60-64	40.7	42.4			
65-69	36.6	29.5			
70+	5.3	3.7			
Total	100.0	100.0			

Source: Survey of Retirement and Retirement Intentions

### Patterns of early retirement

In both 1983 and 1992 the majority of retired men aged 55 years and over had retired early. The proportion retiring early also increased over the period, particularly for those who retired between the age of 55 and 59 years, from 18% in 1983 to 24% in 1992. In contrast the proportion who retired aged 65-69 years declined from 37% to 30%.

#### Reasons for retirement

In both 1983 and 1992, almost half of retired men aged 45 years or over had retired for reasons of their own ill health. However, there was a marked increase in the proportion who retired for employment and other reasons, from 7% in 1983 to 16% in 1992.

### Sources of income

The availability of non-labour sources of income is generally acknowledged as critical to a person's decision to retire. This is regardless of whether retirement is voluntary or forced through labour market conditions, or through ill health or injury. Men who

Table 3

Reasons for early retirement among men aged 45 years or over

1983	1992
%	%
90.3	81.4
49.4	49.6
25.7	19.5
2.4	2.6
7.3	16.0
	% 90.3 49.4 25.7 2.4

Source: Survey of Retirement and Retirement Intentions

retire aged 55-64 years are less likely than those who retire at age 65 years or over to receive government pensions or benefits as their main source of income. In 1992, among men who had retired aged 55-64 years, 46% had retirement schemes, investments or savings as their main source of income and 42% had government pensions and benefits. In comparison, among men who had retired aged 65 years or over, 28% had retirement schemes, investments or savings as their main source of income and 64% had government pensions and benefits (see *Retirement income* p. 143).

Along with the decline in full-time labour force participation among older men over the last 20 years has been an increased take-up of service and, more recently, disability pensions. There was a large increase in the number of veterans receiving service pensions during the 1980s, peaking at over 80,000 in 1983-86. The effect of large numbers of World War II veterans reaching their early 60s was a major reason for this increase. By 1993 the number of veterans aged 60-64 years receiving a service pension had declined to just over 6,000, the lowest in 20 years.

Among older men not in the full-time labour force (i.e. working part-time, looking for part-time work or not in the labour force), the take-up rate of the disability pension has increased considerably since the early 1980s, from 26% in 1983 to 39% in 1993. The patterns were slightly different for those aged

Table 4
Veterans receiving service pensions

Year	Aged less than 60 years	Aged 60-64 years		
	,000	'000'		
1973	6.3	15.7		
1975	7.4	22.2		
1977	8.8	33.5		
1979	11.0	47.2		
1981	11.8	61.3		
1983	9.8	73.2		
1985	4.1	85.3		
1987	2.3	46.9		
1989	2.3	30.3		
1991	2.6	7.7		
1993	3.3	6.1		

Source: Department of Veterans Affairs

Table 5

Men receiving a disability pension

Year	Age g		not in the full-time labor force						
Year	55-59	60-64	55-59 years	60-64 years					
	1000	'000	%	%					
1973	13.4	25.1	30.9	33.3					
1975	16.4	30.8	34.7	30.7					
1977	21.9	37.2	38.5	30.6					
1979	29.4	41.9	38.5	29.3					
1981	31.4	41.3	36.7	26.4					
1983	33.7	42.0	34.2	21.2					
1985	43.4	49.8	40.6	23.1					
1987	47.2	59.9	41.0	27.5					
1989	45.7	71.4	38.9	34.4					
1991	46.0	79.0	35.1	36.8					
1993	53.9	86.7	38.3	40.2					

Source: Labour Force Survey; Cass et al (1988)<sup>1</sup>; Department of Social Security *Ten Year Statistical* Summary and Characteristics of Pensioners

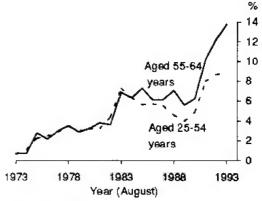
55-59 years and those aged 60-64 years. In the former group, 34% were in receipt of a disability pension in 1983, rising to 41% in 1987 and then easing to 38% by 1993. Among the latter group, 21% were in receipt of a disability pension in 1983 and this proportion rose over the next ten years to reach 40% in 1993. The increase was particularly sharp in the late 1980s when the numbers receiving a service pension were in decline. In addition, there appears to be a broad association with unemployment rates. For example, the unemployment rate of men aged 60-64 years was 7% in 1983 compared to 16% in 1993; corresponding figures for men aged 55-59 years were 7% and 12%. This is consistent with the increased likelihood of meeting the eligibility criteria for a disability pension in times of high unemployment (see Social security transfer payments p. 147).

## Unemployment and discouragement

With rising levels of unemployment over the last 10 years, the question arises as to whether or not early retirement is voluntary. Older men have been particularly affected by changes in labour market conditions since the early 1970s. This is partly because they were concentrated in some of the industries and occupations that have been most affected by structural change. In addition, they have

Figure 2

Male unemployment rate



Source: Labour Force Survey

higher levels of disability and ill health than younger men, reduced job mobility, and, often, less current qualifications. These labour market difficulties for older men have led to higher unemployment rates than prime aged men, longer durations of unemployment, and a higher incidence of long-term unemployment (see Long-term unemployment p. 114).

Since the 1983 recession the unemployment rate of men aged 55-64 years has been consistently higher than that of men aged 25-54 years. Following the economic downturns in 1983 and 1990, there were increases in unemployment rates at all ages. In 1985 the unemployment rate of men aged 55-64 years was nearly 2 percentage points higher than that of men aged 25-54 years. In 1992 the unemployment rate of men aged 55-64 years had risen to over 3 percentage points higher than that of men aged 25-54 years. By August 1993 the unemployment rate of men aged 55-64 years was 5 percentage points higher than that of younger men (14% compared to 9%).

The incidence of long-term unemployment increases markedly with age. In 1993 the incidence of long-term unemployment among men aged 55-64 years was 61%, compared to 43% for men aged 25-54 years, suggesting that once older men become unemployed the likelihood of them becoming long-term unemployed is substantial.

In 1993 unemployed men aged 55-64 years were almost four times as likely to be long-term unemployed as unemployed men aged 25-54 years. The average duration of

## For more information

- Retirement and Retirement Intentions, Australia (6238.0)
- Persons Not in the Labour Force (6220.0)
- Detailed Inquiries: Assistant Director, Labour Force Supplementary Surveys (06) 252 6504
- General inquiries: see p. 209

unemployment for men aged 55-64 years was about two years compared to about 15 months for men aged 25-54 years.

It is difficult to assess precisely how much labour market conditions have actually discouraged labour force participation of older men although the chance of older men becoming discouraged jobseekers is greater than that of prime aged men. Between 1983 and 1993, the ratio of discouraged jobseekers to unemployed among older men was at least four times higher than the ratio among younger men.

### **Endnotes**

1 Cass, B., Gibson, F. and Tito, F. (1988) Towards Enabling Policies: Income Support for People with Disabilities Social Security Review Issues Paper No. 5.

Table 6

### Male discouraged jobseekers

Year	Age g	•	Number/100 unemployed in same age group (years					
	25-54	55-64	25-54	55-64				
	.000	'000'	ratio	ratio				
1983	6.6	7.3	3.2	21.8				
1985	4.1	4.5	2.5	12,5				
1987(a)	5.1	7.5	2.7	23.9				
1989	5.3	4.9	3.8	17.3				
1991	7.8	9.2	2.8	17.2				
1993	9.4	14.5	3.0	23.8				

 (a) These figures refer to March of year indicated; all other figures refer to September.

Source: Survey of Persons Not in the Labour Force

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1989	5.3	4.9	3.8	17.3				
1991	7.8	9.2	2.8	17.2				
1993	9.4	14.5	3.0	23.8				

 (a) These figures refer to March of year Indicated; all other figures refer to September.

Source: Survey of Persons Not in the Labour Force

# Income

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## Income — national summary

INCOME DISTRIBUTION	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
GDP(A) per capita (1989-90 prices)	\$1000	18.7	17.9	18.7	19.4	19.9	20.1	20.7	21.3	21.7	21.2	21.0
Reaf household disposable income per mean head of population	\$'000	n.a.	n.a.	n.a.	12.7	12.9	12.6	12.9	13.4	13.8	13.6	13.8
Share of gross income going to top quintile (of all income units)	%	43.9	n.a.	n.a.	n.a.	45.3	n,a,	n.a.	n.a.	46.2	n.a.	n.a.
Share of gross income going to bottom quintile (of all Income units)	%	4.9	n.a.	n.a.	n.a.	4.7	n.a.	n.a.	n.a.	4.8	n.a.	n.a.
Gini coefficient (of all income units)	no.	0.40	n.a.	n.a.	n.a.	0.41	n.a.	n.a.	n.a.	0.42	п.а.	n.a.
Median gross weekly income of married couple with dependants income units	\$	410	n.a.	n.a.	n.a.	550	n.a.	n.a.	n.a.	755	n.a.	n.a.
Median gross weekly income of one parent income units	\$	130	n.a.	n.a.	n.a.	220	n.a.	n.a.	n.ą.	278	n.a.	n.a.
SOURCES OF INCOME	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Main income source from government benefits (of all income units)	%	21.3	n.a.	n.a.	n.a.	27.7	n.a.	n.a.	n.a.	26.6	n.a.	n.a.
Main income source from government benefits (of married couples with dependants income units)	%	7.6	n.a.	n.a.	n.a.	8.4	n.a.	n.a.	n.a.	8.4	n.a.	n.a.
Main income source from government benefits (of one parent income units)	%	55.7	n.a.	n,a.	n.a.	64.4	n.a.	n.a.	n.a.	61.3	n.a.	n.a.
Mean total weekly earnings of all employees	\$	n.a.	297	n. <b>a</b> .	346	368	384	411	441	475	494	510
Mean total weekly earnings of full-time adult employees	\$	n.a.	355	n.a.	410	436	462	497	538	571	597	616
Mean weekly ordinary time earnings of full-time non-managerial adult employees	\$	n.a.	318	n.a.	361	384	406	433	4 <del>6</del> 6	495	521	541
Female/male ratio of mean total full-time adult weekly earnings	no,	n,a.	0.79	n.a.	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.82
INCOME SUPPORT	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Aged on age pension	%	74.7	74.0	70.4	67.1	64.6	62.7	61.5	60.2	59.2	59.3	61.0
Age pensioners	'000	1 367	1 391	1 358	1 332	1 325	1 322	1 329	1 334	1 340	1 376	1 446
Unemployment beneficiaries	.000	374.5	633.3	588.1	562.3	568.7	553.7	478.0	389.8	419.8	676.7	851.8
Disability support pensioners	'000	216.6	220.3	240.6	259.2	273.8	289.1	296.9	307.8	306.7	334.2	378,6
Sole parent pensioners	.000	208.7	224.5	234.7	246.3	250.9	248.9	238.7	239.5	248.9	265.7	278.2
GDP spent on income support	%	6.0	6.7	6.8	6.6	6.3	6.1	5.8	5.4	5.4	6.2	7.2
EXPENDITURE	Units	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Consumer price index	no.	54.6	60.9	65.0	67.8	73.5	80.4	86.3	92.6	100.0	105.3	107.3

Reference periods:

Data for GDP(A) per capita, real household disposable income, GDP spent on income support and consumer price index are for the financial year ending 30 June.

## Income — State summary

INCOME DISTRIBUTION	Units	Year	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Gross state product per head of mean population (market price)	\$'000	1991-92	22.8	22.9	19.8	20.3	23.9	18.0	24.6	28.3	22.2
Household disposable income per mean head of population	000*	1991-92	15.7	15.4	13.2	14.2	13.9	12.6	13. <del>6</del>	19.2	14.9
Share of net equivalent income going to top quintile (of net income less housing costs)	%	1990	37.8	37.9	37.5	36.5	37.9	36.8	35.2	37.5	37.7
Share of net equivalent income going to bottom quintile (of net income less housing costs)	%	1990	7.5	7.6	7.5	8.2	7.3	8.0	7.4	7.5	7.6
Gini coefficient (net equivalent Income less housing costs)	no.	1990	0.30	0.30	0.30	0.28	0.30	0.29	0.28	0.30	0.30
Median gross weekly income of married couple with dependants income units	\$	1990	809	748	672	702	765	673	921	926	755
Median gross weekly income of one parent income units	\$	1990	276	284	281	294	262	264	367	355	279
SOURCES OF INCOME	Units	Year	NSW	Vic.	CHO	SA	WA	Tas.	NT	ACT	Aust.
Main income source from government benefits (of all income units)	%	1990	26.6	24.7	28.0	30.6	27.0	33.7	16.3	16.4	26.7
Main income source from government benefits (of married couple with dependants income units)	%	1990	7.9	7.2	8.8	10.9	9.2	16.4	<b>*</b> 7.0	*4.2	8.4
Main income source from government benefits (of one parent income units)	%	1990	61.7	58.8	62.8	60.1	67.1	68.8	*53.2	<b>*</b> 41.8	61.3
Mean total weekly earnings of all employees	\$	1992	532	511	478	475	502	481	556	571	510
Mean total weekly earnings of full-time adult employees	\$	1992	640	610	578	589	623	586	659	684	616
Mean weekly ordinary time earnings of full-time non- managerial adult employees	\$	1992	551	537	522	526	548	530	588	581	541
Female/male ratio of mean total full-time adult weekly earnings	no.	1992	0.81	0.83	0.83	0.86	0.79	0.82	0.80	0.80	0.82
INCOME SUPPORT	Units	Year	NSW	Vic.	Qld.	SA	WA	Tas.	NT	ACT	Aust.
Aged on age pension	%	1992	59.1	60.3	61.0	64.4	59.2	60.6	65.4	44.0	61.0
Age pensioners	'000	1992	501.7	371.2	239.1	144.6	115.4	40.3	3.9	10.1	1 446.2
Unemployment beneficiaries	'000	1992	275.0	224.2	147.1	75.9	81.7	28.6	12.2	7.1	851.8
Disability support pensioners	'0000	1992	129.6	90.0	62.1	36.0	35.1	11.7	3.0	3.0	378.6
Sole parent pensioners	'000	1992	97.9	62.8	54.3	25.2	28.9	9,6	4.4	4.0	287.2

### Income — definitions and references

Adult employees — employees (as defined) aged 21 years or over and employees who, although under 21 years of age, are paid at the full adult rate for their occupation.

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

**Age pensioners** — the number of age pensioners at 30 June. The figure does not include associated wife's or carer's pensions.

Reference: Department of Social Security *Annual Report* 

Aged on age pension — the number of age pensioners expressed as a proportion of the aged (men aged 65 years and over and women aged 60 years and over).

Reference: Estimated Resident Population by Sex and Age: States and Territories of Australia (3201.0); Department of Social Security Annual Report

Consumer price index (CPI) — a measure of change over time in the retail price of a constant basket of consumer goods and services. The choice of goods and services is representative of consumption patterns of resident employee households in Australian metropolitan areas. Indexed to 1990=100. Reference: Consumer Price Index (6461.0)

Current usual income — usual income at time of interview.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Disability support pensioners — the number of people receiving the disability support pension at 30 June. The figure does not include associated wife's or carer's pensions.

Reference: Department of Social Security Annual Report

Employees — all wage and salary earners who received pay for any part of the reference period.

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Equivalent income — current usual income (as defined) adjusted on the basis of size, composition and labour force status of the income unit, using Henderson equivalence scales.

Reference: Social Indicators 5 (4101.0)

### Female/male ratio of mean total full-time adult weekly earnings —

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Full-time employees — permanent, temporary and casual employees (as defined) who normally work the agreed or award hours of a full-time employee in their occupation and who received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more a week.

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

GDP(A) per capita — gross domestic product (GDP) is an aggregate measure of the value of economic production in Australia in a given period. GDP(A) is an average of income, expenditure and production based GDP.

Reference: Australian National Accounts; National Income, Expenditure and Product (5204.0)

GDP spent on income support — special appropriations under the Social Security Act for income support as a proportion of GDP(I) original.

Reference: Australian National Accounts: National Income and Expenditure (5206.0); Department of Social Security Annual Report

Gini coefficient — an index for measuring inequality of income. The index, always between 0 and 1, is low for populations with relatively equal income distributions and high for populations with relatively unequal distributions.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Gross income — current usual income (as defined) received per week at the time of interview, before tax or any other deductions are made.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Gross state product per mean head of population — a similar measure to GDP per capita but based on State income estimates.

Reference: Australian National Accounts: Concepts, Sources and Methods (\$216.0)

Household disposable income per mean head of population — household income less income tax and other direct taxes, fees, fines etc. charged to persons by the general government, consumer debt interest and transfers overseas, expressed as a value per mean head of population in each State/Territory. Reference: Australian Economic Indicators (1350.0); Australian Demographic Statistics (3101.0)

Income unit — a group of related people who live together and form a single spending unit. Income units can be considered to be analogous to family units with the distinction that non-dependent children and other adults living in the same household are treated as separate income units. Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Main income source from government benefits — income units who received 50% or more of their current usual income (as defined) from government pensions or benefits.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Managerial employees — adult managerial, executive and professional staff, generally defined as those employees who do not receive payment for overtime, and/or who are in charge of a significant number of employees in a separate establishment(s).

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

### Mean total weekly earnings -

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

### Mean weekly ordinary time earnings of full-time non-managerial adults —

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Median weekly income — the level of weekly income at which half the income units have higher incomes and half have lower incomes.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Net income — gross income(as defined) less personal income tax (including the Medicare levy).

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Ordinary time — refers to employee's award or standard agreed hours of work. It includes stand-by or reporting time which are part of standard hours of work, and that part of annual leave, paid sick leave and long service leave taken during the reference period.

Reference: Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)

Quintile — twenty per cent groupings of the population when income units are ranked in ascending order according to each income unit's income.

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Real household disposable income per mean head of population — household disposable income per mean head of population (as defined) deflated by the implicit price deflator for private final consumption expenditure.

Reference: Australian Economic Indicators

(1350.0); Australian Demographic Statistics

(3101.0)

Sole parent pensioners — the number of recipients of the sole parent pension at 30 June. In 1989, the supporting parent benefit and A class widow pensions were combined to form the sole parent pension. Figures prior to 1989 include these two pensions.

Reference: Department of Social Security Annual Reports

Share of gross/net equivalent income going to top/bottom quintile — share of gross/net equivalent income (as defined) received by the 20% of income units with the highest/lowest

Reference: Survey of Income & Housing Costs and Amenities (6523.0)

Unemployment beneficiaries — the number of recipients of unemployment benefit, job search allowance and new start allowance. June monthly average.

Reference: Department of Social Security Annual Report



# Trends in earnings distribution

### INCOME DISTRIBUTION

inequality in the distribution of earnings of full-time adult employees has increased in the last decade.

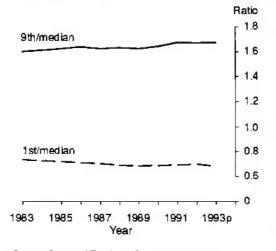
Increasing inequality in the distribution of earnings of full-time adult employees in Australia became evident in the 1980s. However, the increase was small and comparable to trends in countries such as Canada and Japan. An OECD study compared earnings distributions in 17 countries and found that increases in dispersion in the 1980s occurred in twelve of them<sup>1</sup>. The early 1990s figures for Australia suggest that this trend may be continuing.

Although the distribution of earnings highlights the disparity between high and low earning employees, an increase in dispersion is not in itself indicative of changing economic well-being. An employee's earnings could decline relative to other employees' and yet still increase in real terms. Similarly, disposable incomes could increase or remain static in relative terms even if gross earnings fell relatively. Distributional changes that increase the difference between high and low earners suggest increasing inequality and increasing polarisation of full-time employees into comparatively high and low earners.

Both male and female full-time adult employees experienced increasing earnings inequality through the 1980s and into the early 1990s. Earnings inequality was consistently greater among men and the rate

Figure 1

Earnings distribution ratios for full-time adult employees



Source: Survey of Employee Earnings and Hours

### Measuring earnings distribution

The movement of earnings distribution ratios is a simple way of measuring change in the distribution of earnings over a period of time. Earnings at points near the top and bottom of the distribution are expressed as a ratio to the median earnings (the amount at which half of employees earn more and half earn less) and the difference between the two ratios provides a simple index of dispersion. This is repeated for consecutive distributions. An increasing difference between the ratios indicates increasing linequality.

The values in the distribution used in this review are the upper cut-off point of the 1st decile and the upper cut-off point of the 9th decile i.e. the amount below which 10 per cent of employees earned less and the amount above which 10 per cent of employees earned more, respectively. Throughout this review these points will simply be referred to as the top of the 1st decile and the top of the 9th decile.

at which male earnings inequality increased was also slightly greater than that for females.

The OECD considered that among the economic and demographic factors that may have underlain the trend towards greater dispersion of earnings during the 1980s, the decentralisation of wage bargaining was particularly pertinent to Australia<sup>1</sup>.

In Australia, the 1983 Wages Accord established a centralised wage fixing system that took into account economic policies and the Consumer Price Index (CPI). Several re-negotiations of the Accord took place such that, by 1987, wage indexation was abandoned due to economic conditions. The replacement was a two-tier system that distributed a flat increase to all workers and made further increase provisional on improvements in efficiency. In 1988 and 1989 efficiency provisions were replaced by award restructuring and training provisions<sup>2</sup>.

Another factor underlying the trend towards greater earnings disparity has been the shift among the full-time labour force towards more highly skilled, and hence higher earning, occupations. Between 1986 and 1993 the numbers of people employed as managers and administrators, and in professional occupations increased by 17% and 26% respectively. The numbers employed as plant and machine operators,

Table 1
Earnings distribution ratios for full-time adult employees

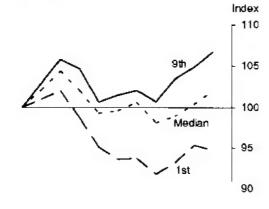
	1983	1985	1986	1987	1988	1989	1990	1991	1992	1993p
	ratio									
Males										
9th/median	1.60	1.62	1.64	1.62	1.63	1.62	1.64	1.66	1.68	1.70
1st/median	0.72	0.70	0.69	0.68	0.68	0.67	0.67	0.67	0.67	0.65
Females										
9th/median	1.50	1.50	1.51	1.50	1.52	1.51	1.49	1.53	1.55	1.56
1st/median	0.78	0.78	0.77	0.75	0.74	0.73	0.74	0.74	0.73	0.74
Persons										
9th/median	1.60	1.62	1.64	1.62	1.63	1.62	1.64	1.68	1.67	1.68
1st/median	0.73	0.72	0.71	0.70	0.69	0.68	0,69	0.69	0.70	0.68

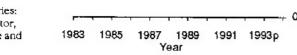
Source: Survey of Employee Earnings and Hours

and labourers declined by 6% and 4% respectively. The total full-time labour force increased by 4% over the period.

Earnings can be adjusted for changes in the CPI. The resulting pattern of real earnings growth shows that, after considerable increases early in the 1980s, earnings devalued, in real terms, such that by 1987 earnings at the top of the 9th decile and median earnings had returned to 1983 values, and earnings at the top of the 1st decile had dropped to 95% of 1983 values.

Figure 2
Real earnings index(a) for selected deciles





 (a) Index based on 1983 earnings adjusted to constant values using the CPI.

Source: Survey of Employee Earnings and Hours; CPI Ausstats

### Consumer Price Index (CPI)

The CPI is a measure of change over time in the retail price of a constant basket of consumer goods and services. The choice of goods and services is representative of consumption patterns of resident employee households in Australian metropolitan areas. The CPI is often, and inappropriately, referred to as a cost-of-living index. The CPI does not take into account changes in the standard of living and substitutions consumers may make in response to changing market conditions.

Between 1987 and 1990, median carnings declined slightly in real terms while earnings at the level of the top of the 9th decile maintained their value. For employees at the top of the 1st decile, earnings diminished in real terms to a low of 92% of 1983 values in 1990. Since 1990, real earnings have increased for the three points in the distribution, but for employees at the top of the 1st decile the real value of their earnings in 1993 was still less (95%) than the value of their earnings in 1983.

### **Endnotes**

- 1 Organisation for Economic Co-operation and Development (July 1993) Earnings Inequality: changes in the 1980s OECD Employment Outlook.
- 2 Murdoch University Economics Programme: July 1989 Six Years of the Accord: an Assessment Working Paper No. 28.

# For more information

- Distribution and Composition of Employee Earnings and Hours, Australia (6306.0)
- Detailed inquiries: Assistant Director, Labour Income and Disputes (06) 252 6572
- General inquiries:
   see p. 209

# Tertiary student income

### SOURCES OF INCOME

In 1992, 31% of full-time tertiary students received regular financial support (over \$30 a week) from a member of their family not living with them.

Tertiary students gain their income from diverse sources. In 1992, full-time tertiary students were either mainly receiving income from paid employment (35%), in receipt of government assistance (mainly AUSTUDY) (27%) or being supported by family or partners (23%). The remainder (15%) had other main sources of income such as self-employment and investments. Part-time students were predominantly wage and salary earners and therefore differed in their income characteristics from full-time students.

Government support for full-time students is available in the form of a means tested allowance that is intended to contribute towards their living costs. The current allowance scheme, AUSTUDY, is a development of the Tertiary Education Assistance Scheme (TEAS) which was introduced in 1973. Prior to the introduction

Table 1
Selected characteristics of tertiary students aged 15-24 years, 1992

Student status

	Student status			
Characteristics	Full- time	Part- time		
	%	%		
Married or de facto	3.5	12.6		
Nature of occupancy				
Renting	26.5	19.5		
Boarding	12.8	41.8		
Free rent or board with parents	57.2	31.2		
Receiving regular financial assistance(a) from family not living with them	31.2	10.7		
Principal source of income				
Wages or salary	35.5	79.0		
Government pension or benefit	27.2	13.8		
Nil or partner's income	22.5	4.1		
Other sources	14.8	3.2		
	.000	000		
Total students	406.5	256.3		

<sup>(</sup>a) Over \$30 a week.

Source: Survey of Familles in Australia

### Student incomes

Tertiary students included in this review are those who were aged 15-24 years and were studying at a university (higher education), a technical or a TAFE college in 1992.

Students may receive income from a variety of sources including wages and salaries, government benefits (particularly AUSTUDY), and regular payments from parents. However, income is not necessarily a good measure of their economic well-being because students may be in receipt of substantial payment in kind, such as free accommodation and payment of a range of other expenses, from parents. The expectation that parents will contribute to the support of their dependent children while they undertake tertiary study is reflected in the means testing of AUSTUDY payments on the basis of the parents' income. Thus, students who do not qualify for AUSTUDY and receive their income mainly from paid part-time work may still be principally supported by their parents.

### Selected AUSTUDY rates, 1992

In 1992, the year on which much of this analysis is based, maximum weekly independent rates for students without dependents were: 16-17 years — \$106; 18-21 years — \$117; 21 years and over — \$139.

Maximum weekly living-at-home rates were: 16-17 years — \$64; 18-21 years — \$77; 21 years and over — \$91<sup>1</sup>.

of TEAS, financial support for students came mainly from Commonwealth and State scholarships which were paid to approximately 55% of full-time higher education students. When TEAS was introduced, tuition fees for higher education were also abolished making tertiary education more accessible than it had been in the past. On introducing the TEAS legislation, it was suggested that 'allowances ought to be sufficient to give students the leisure to think as they pursued their studies'. This statement highlights the dilemma facing students; the compromise between obtaining income and studying. AUSTUDY replaced TEAS in 1986 and changes in the means testing rules directed study assistance more towards students in low-income families<sup>2</sup>.

In 1989, tuition fees were reintroduced for higher education institutions in the form of the Higher Education Contribution Scheme

Table 2

Principal source of income of full-time students aged 15-24 years by type of tertiary institution, 1992

	Higher e	ducation		Technic	ege	
Principal source of income	Males	Females	Persons	Males	Females	Persons
	%	%	%	%	%	%
Wages or salary	31.7	41.0	36.4	33.6	30.0	31.9
Government pension or benefit.	25.7	22.8	24.3	32.6	45.0	38.6
Nil/partner's income	21.5	22.7	22.1	26.8	21.2*	24.1
Other sources(a)	21.1	13.5	17.2	6.9*	* *	5.4*
Total	100.0	100.0	100.0	100.0	100.0	100.0
	.000	,000	'000°	'000	'000	'000
Total	160.3	163.6	323.9	43.5	39.1	82.6

(a) includes own business or share in partnership, Investments and other sources.

Source: Survey of Families in Australia

(HECS). Students may pay the charge directly (and receive a 25% discount) or may elect to pay the charge later through the taxation system when their taxable income exceeds a minimum level (currently average weekly earnings)<sup>3</sup>.

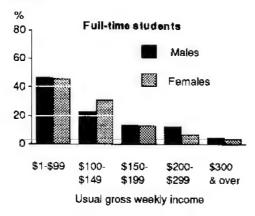
### Principal source of income

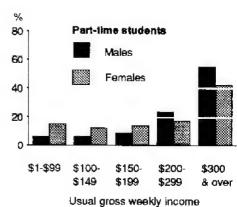
Part-time tertiary students' incomes came predominantly from wages or salary in 1992, particularly among those studying at TAFE colleges. Full-time students had a more diverse distribution of income sources, although overall, 35% stated wage or salary earnings as their principal source of income. 23% of full-time students and 4% of part-time students had no income themselves or relied

on their partner's income. The majority (72%) of full-time students who stated nil or partner's income were dependent children living with their parent(s). Only a very small proportion of students who stated nil or partner's income were married or in a de facto partnership. This is due to the small proportion of full-time and part-time students (3% and 13% respectively) who were married or in de facto partnerships.

Another indicator of the level of parental support given to students (not necessarily only to those with no income) is that 59% of full-time students and 32% of part-time tertiary students lived rent or board free, usually with their parent(s). In addition, 31% and 11% of full-time and part-time students

Figure 1
Income distribution of students aged 15-24 years who received income, 1992





Source: Survey of Families in Australia

respectively, received regular financial assistance (over \$30 a week) from family members not living with them.

Government pensions or benefits were the principal source of income for 24% of full-time higher education students and 39% of full-time TAFE students. Most of these students received AUSTUDY only from government sources but their incomes may have been supplemented by other sources such as parents or part-time work. However, for 68% of students who received AUSTUDY only from government sources, the AUSTUDY allowance represented over 91% of their total income.

### **Gross weekly income**

In 1992, almost a quarter (23%) of full-time tertiary students usually received no weekly income. Of those who did receive income, 46% received under \$100 a week and 14% received over \$200 a week.

The income distribution pattern for part-time students, who were mainly wage and salary earners, was the opposite to that of full-time students. Only 4% had no income and 71% of those who received income received over \$200 a week.

In general, the patterns of income distribution for students were similar for men

Table 4

Distribution of weekly paid hours worked by students aged 15-24 years, 1992

	Student status			
Number of hours	Full-time	Part-time		
	%	%		
None	58.4	17.1		
1-9	19.8	2.8		
10-19	14.5	3.4		
20-34	4,1	7.7		
35 or more (full-time)	3.2	69.0		
Total	100.0	100.0		

Source: Survey of Families in Australia

and women. However, among part-time students a larger proportion of women than men were represented in the lower income ranges.

Male part-time higher education students whose principal source of income was wages or salary had the highest median income (\$413). The lowest median income (\$78) occurred among full-time male TAFE students whose principal source of income was government pensions or benefits.

Table 3

Median gross weekly income of students aged 15-24 years by principal source and selected characteristics, 1992

	Government p	ension or benefit	Wages or salary		
Characteristics	Males	Females	Males	Females	
	\$	\$	\$	\$	
Higher education					
Full-time	106	86	112	102	
Part-time	141*	142*	413	304	
Technical/TAFE					
Full-time	78	90	183	104	
Part-time	124	80	317	332	
Age group (years)					
15-16	64*	••	183*	142*	
17-18	77	77	232	105	
19-20	83	79	255	139	
21-22	127	117	310	247	
23-24	142	142	415	424	
All students	100	89	269	161	

Source: Survey of Families in Australia

When examined by age, the median income of students whose principal source of income was government pensions or benefits was predictably aligned to the age-specific AUSTUDY allowances. For students whose principal source of income was wages or salary, median incomes generally increased with age, a pattern related to age-specific rates of pay and labour force experience.

## For more information

- Australia's Families
   — Selected Findings from the Survey of Families in Australia (4418.0)
- Detailed inquiries: Assistant Director, Family Survey (06) 252 7030
- General inquires: see p. 209

### **Paid employment**

83% of part-time students worked in paid employment, and most of these worked full-time (over 35 hours a week). 42% of full-time students worked in paid employment and nearly all of them worked less than 20 hours a week. Students looking for part-time work have benefited from the structural changes that have taken place in the labour market. The growth of service industries, which favour part-time workers, have made more part-time jobs available (see Trends in part-time work p. 103).

### **Endnotes**

- 1 Department of Employment, Education and Training (1993) Report on the Operation of the Student Assistance Act 1992.
- 2 House of Representatives Standing Committee on Employment, Education and Training (1991) Student Financial Assistance.
- 3 Australian Taxation Office and Department of Employment, Education and Training (1994) HECS: Your Questions Answered.

### Retirement income

### SOURCES OF INCOME

Lump sum
payments received
by recent retirees
were generally too
small to provide
substantial income
If invested.

Sources of income of retired people often change over the period of their retirement. In the past, there has been a tendency for retired people to move from private income sources to government benefits. Recent government initiatives have been directed towards reducing the reliance on government benefits of the future aged population.

In October 1992, the most common main source of income at retirement continued to be government pensions and benefits, although superannuation and part-time work had increased their shares slightly since 1986.

The age pension, a non-contributory, flat rate, means tested benefit, has been paid by the Federal government for almost 80 years and is considered to be the cornerstone of Australia's retirement income system. However, one of the most significant issues that has shaped recent government retirement income policy is our ageing population. As a result of lower birth rates, increases in life expectancy and the ageing of the 'baby boom' generation, the proportion of aged people in the population is expected to increase by 41% in the 48-year period 1993-2041 (see Projections of the aged population p. 27). This increase in the proportion of aged people implies an increase in the proportion of government

### **Data sources**

The Survey of Retirement and Retirement Intentions collects information from people aged 45 years and over who had retired or who intended to retire at some stage in the future. In this review, retired people are defined as those who ceased working full-time at age 45 years or more and who have no further intention of working full-time or of looking for full-time work.

For retired people, information was obtained about their main source of income at retirement i.e. immediately after ceasing full-time work, as well as at the time of the survey. People intending to retire were asked about their expected main source of income in retirement.

This survey did not collect information on the level of income received but has been used in preference to the 1990 Survey of Income & Housing Costs and Amenities because it specifically identified retired people.

funding directed to the aged pension system and a decrease in the proportion of tax payers contributing to government funds.

An important response to this issue by government has been legislation to improve superannuation coverage of the employed. The Superannuation Guarantee Act 1992 is seen as a means of reducing the overall cost

Table 1

Main source of income at retirement

Main source of income at retirement	November 1986	November 1989	October 1992
	%	%	%
Government benefits(a)	46.4	42.2	44.2
Superannuation	10.1	11.0	11.4
Other retirement schemes, investments or savings	18.9	20.0	19.1
Part-time work	3.8	4.2	4.7
Someone else's income	17.3	17.6	15.8
Other(b)	3.4	5.0	4.7
Total	100.0	100.0	100.0
	'000	'000	'000
Total	1 467.4	1 610.0	1 716.8

<sup>(</sup>a) Sickness, special and other benefits not included in 1986 and 1989.

<sup>(</sup>b) Includes rent, farm, business, property, accumulated leave and compensation.

Table 2

Retirement scheme(a) membership

Retirement scheme membership at retirement	November 1986	November 1989	October 1992
AND	%	%	%
Belonged to a retirement scheme	39.0	41.8	47.0
Had superannuation cover	35.0	38.1	43.3
Did not belong to a retirement scheme	61.0	58.2	52.9
Total	100.0	100.0	100.0

<sup>(</sup>a) Includes superannuation schemes, life Insurance policies or similar schemes that provide a financial benefit when a person leaves full-time work.

Source: Survey of Retirement and Retirement Intentions

of age pensions in the future as well as of increasing national savings.

Current patterns of income support from superannuation are related to the limited coverage and adequacy of superannuation schemes in the past. This is illustrated by the fact that in 1992, although 43% of retired people had had superannuation cover at retirement, only 11% stated that superannuation was their main source of income at retirement. This situation is slowly changing. Retired people in 1992 were more likely to have had superannuation cover on retirement than retired people in 1986 (43% compared to 35%), and the proportion with superannuation as a main source of income at retirement had increased slightly since 1986. For people aged 45 years and over in October 1992 who were currently working and who intended to retire, 33% expected superannuation to be their main source of income in retirement.

The proportion of retired people whose main source of income came from part-time work increased slightly from 3.8% in 1986 to 4.7% in 1992. This increase is associated with the general growth in part-time employment. (see *Trends in part-time work* p. 103).

Some 34% (593,000) of retired people had a different main source of income in October 1992 from when they retired. The change was predominantly one from non-government sources to government benefits. Among men, the major change was from depending on retirement schemes, investments or savings (39% at retirement and 28% by October 1992) while among women the change was mainly from being dependent on someone else's income (36% at retirement and 15% by October 1992). Such changes are related both to age at retirement and eligibility for the age pension.

Table 3

Main source of income of retired people

	At retirem	ent	October 1992		
Main source of income	Males	Females	Males	Females	
	%	%	%	%	
Government benefits	49.9	35.6	64.1	62.0	
Retirement schemes, investments or savings	38.5	18.1	27.9	14.2	
Rent, farm, business or property	3.2	2.4	2.8	2.4	
Part-time work	3.6	6.3	3.0	5.6	
Someone else's income	2.6	36.2	1.5	15.0	
Other	2.1	1.4	0.8	0.9	
Total	100.0	100.0	100.0	100.0	
	'000	'000	'000	'0000	
Total	1 042.8	674.0	1 042.8	674.0	

### Age at retirement

The main source of income at retirement reported by retired people varied distinctly with age at retirement. Early retirement is commonly thought of as taking place between the ages of 55 and 65 years for men and 55 and 60 years for women. This is related to the practice of making superannuation payouts available to policy holders at 55 years of age. Early retirement, if voluntary, must be funded by the individual. People who retired earlier than 55 years of age were more likely than older retirees to have done so involuntarily, particularly for reasons of ill health (72% of men and 26% of women aged 45-54 years), and were more likely to have retired on government benefits (for men) or someone else's income (for women).

Of men who had retired aged 45-54 years, 53% were dependent on a government benefit when they retired. The remaining 47% had had diverse main sources of income at retirement with retirement schemes,

investments or savings being the most common (30%). Men who retired between the ages of 55 and 64 years were more likely to have had a non-government main source of income (58%).

Of women who had retired between the ages of 45 and 54 years, 50% were dependent on someone else's income at retirement. This proportion reduced to 39% for women who had retired aged 55-59 years.

### **Lump sum payments**

Some 358,000 retirees had retired between 1988 and 1992 (recent retirees), of whom about 50% had received a lump sum payment from a retirement scheme. The majority of recent retirees were male (64%) and they were more likely to have belonged to a retirement scheme than female recent retirees (75% compared to 60%) and were more likely to have received a lump sum payment from the scheme (77% compared to 59%).

Table 4
Retired people in 1992 by age at retirement

	Age group (years)				
Main source of income at retirement	45-54	55-59 or 64(a)	60 or 65 & over(a)	Total	
Males	%	%	%	%	
Government benefits	52.6	42.2	63.9	49.9	
Retirement schemes, investments or savings	29.7	46.0	28.3	38.5	
Rent, farm, business or property	3.6	2.9	3.6	3.2	
Part-time work	5.0	4.0	2.1	3.6	
Someone else's income	5.6	2.6	1.1*	2.6	
Other	3.6	2.3	0.9*	2.1	
Total	100.0	100.0	100.0	100.0	
Females					
Government benefits	22.6	31.4	58.3	35.6	
Retirement schemes, investments or savings	12.1	22.0	24.0	18.1	
Rent, farm, business or property	3.3	2.1*	1.5*	2.4	
Part-time work	9.8	4.6	2.4	6.3	
Someone else's income	50.3	38.8	13.3	36.2	
Other	2.0	1.2*	0.6*	1.4	
Total	100.0	100.0	100.0	100.0	
	'0000	'000	.000	.000	
Total males	160.5	589.4	292.9	1 042.8	
Total females	307.4	159.1	207.5	674.0	

(a) Males — 55-64 years and 65 years and over; females — 55-59 years and 60 years and over.

Table 5

Main expenditure by size of lump sum received in 1988-92

Main expenditure of lump sum	Less than \$40 000	\$40 000- \$99 9 <del>99</del>	\$100 000- \$199 999	\$200 000 and over
	%	%	%	%
Roll over, approved deposit fund, deferred annuity, purchased an immediate annuity	26.5	44.6	72.3	73.1
Invested money elsewhere	32.0	29.3	18.7	20.0*
Paid off home, home improvements, bought new home	15.1	17.9	6.9*	* *
Cleared other debts	9.9	**	**	* *
Other(a)	16.6	6.7*	* *	**
Total	100.0	100.0	100.0	100.0
	'000	'000	1000	'0000
Males	47.7	31.8	21.2	17.8
Females	29.2	8.0	2.4*	1.1*
Total	76.9	39.8	23.6	18.8

(a) Includes bought or paid off car and paid for holiday.Source: Survey of Retirement and Retirement Intentions

A large proportion of lump sum payments received by recent retirees were too small to provide substantial income if invested; 48% of payments were under \$40,000. The majority (72%) of female recent retirees who received lump sums received sums under \$40,000. The patterns of expenditure of lumpsum payments reflected the limited investment value of small payments. While 93% of payments over \$200,000 were invested, 58% of sums less than \$40,000 were invested. The expenditure of sums less than \$40,000 included housing related expenditure (15%) and repaying debts (10%).

### **Nature of occupancy**

Outright home ownership allows the maintenance of a higher standard of living than is indicated by level of income alone, particularly for those with low incomes such as age pensioners. The majority of retired people (66%) owned their home outright at retirement, 16% were purchasing their home and 13% were renting accommodation. For 60% of both home owners and purchasers (at retirement) the main source of income at retirement was from non-government sources.

Table 6

Nature of occupancy at retirement of retired people in 1992

### For more information

- Retirement and Retirement Intentions, Australia (6238.0)
- Detailed inquiries: Assistant Director, Labour Force Supplementary Surveys (06) 252 6504
- General inquiries:
   see p. 209

Main source of income at retirement	Owner	Purchaser	Pubilc renter	Private renter	Other	Total
	%	%	%	%	%	%
Government benefits	40.2	40.8	71.6	64.9	51.4	44.3
Retirement schemes, investments or savings	35.1	25.8	13.2	15.7	25.2	30.5
Rent, farm, business, property	3.8	1.9	• •	**	**	2.9
Part-time work	4.6	5.1	3.4*	5.6	3.3*	4.7
Someone else's income	14.4	24.6	10.8	11.9	16.5	15.8
Other	1.9	1.7	**	1.8*	2.6*	1.8
Total	100.0	100.0	100,0	100.0	100.0	100.0
	'000	'000	'000	'000	'000	,000
Total	1 137.6	277.9	74.0	147.7	79.7	1 716.8

# Social security transfer payments

### INCOME SUPPORT

The proportion of the population aged 16 years and over dependent on the main direct government pensions and benefits has almost doubled over the past two decades.

The Federal government takes a major role in redistributing resources within the Australian community, generally from high to low income households. It does so by collecting revenue through direct and indirect taxes and redistributing it in the form of services (such as education and health) or direct income support (such as pensions, benefits and allowances). This review describes the characteristics of people who receive income from the four main direct government sources; the age pension, the unemployment benefit, the disability support pension, and the sole parent pension. Over the past two decades the proportion of people aged 16 years and over who were dependent on the main direct government benefits has almost doubled, from 12% to 23%. The major contributor to this rise has been the increase in the number of people receiving unemployment benefit.

### Australia's welfare system

The development of Australia's welfare system has been sporadic. After the introduction of the age pension in 1909, the invalid pension in 1910, and maternity allowances in 1912, there were no new social

security initiatives until the 1940s when the unemployment benefit and widow's pension were introduced. The next period of activity took place in the early 1970s amid a growing recognition of poverty and a greater interest in social justice and policies to reduce inequality. The focus of this activity was not only increased expenditure on social security, but also increased expenditure on social programs such as health and education<sup>1</sup>.

### A changing society

The rise in the level of social security transfer payments over the past 20 years is directly related to changes in demographic, economic and social conditions. Recurrent periods of recession have a direct effect on the number of people claiming unemployment benefits. There has also been a change in patterns and expectations of work as more women have entered the labour force and more jobs have become part-time (see *Trends in part-time work* p. 103). Demographic changes such as reduced fertility and increased life expectancy are producing an ageing society which impacts on age pension expenditure (see *Projections of the aged population* p. 27).

Total people

Table 1
People receiving selected social security transfer payments

					Total people		
Year Age i	Age pension	Unemployment benefit	Disability pension	Sole parent pension		As % of pop'n aged 16 years and over	
	no.	no.	no.	no.	no.	%	
1973	931 812	37 317	149 609	57 872	1 176 610	12.5	
1975	1 097 225	157 948	168 784	102 533	1 526 490	15.5	
1977	1 205 347	243 884	202 963	127 013	1 779 207	17.5	
1979	1 292 476	312 924	219 843	151 181	1 976 424	18.8	
1981	1 347 430	313 200	221 951	194 468	2 077 049	19.0	
1983	1 390 838	633 281	220 289	224 489	2 468 897	21.7	
1985	1 331 782	562 266	259 162	246 295	2 399 505	20.3	
1987	1 322 174	553 653	289 050	248 907	2 413 784	19.6	
1989	1 334 310	389 794	307 795	239 469	2 271 368	17.7	
1991	1 375 849	676 705	334 234	265 720	2 652 508	20.0	
1993	1 515 682	913 770	406 572	298 444	3 134 468	23.1	

Source: Department of Social Security Annual Report and Ten Year Statistical Summary; Estimated Resident Population

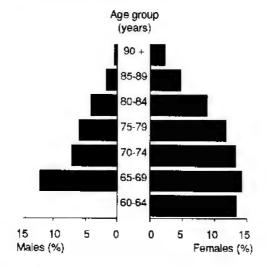
Increased levels of separation and divorce have led to more one parent families.

### Age pension

The Invalid and Old-age Pensions Act 1908 provided for an age pension for men and women aged 65 years or over. The Act included a provision for reducing the qualifying age for women to 60 years when finances permitted. This provision was enacted in 1910. The age of 65 years had been used in previous State schemes and also recommended by the Royal Commission on Old-age Pensions which was held prior to the introduction of the Act. Although at the time no reason was presented for the five-year difference between men and women, Kewley<sup>1</sup> suggests that it was related to the difference between the ages of husbands and wives. In the 1993-94 Federal Budget the government proposed that the age at which a woman can qualify for an age pension be increased from 60 years of age to 65 years. This proposal, if introduced, will be implemented progressively, commencing in 1995, by increasing the qualifying age by a quarter of a year per year over a period of 20 years.

The age pension has always been non-contributory but is means and assets tested. Changes to means and assets testes in the last 20 years have led to a decrease in the proportion of the aged receiving the age pension. In June 1993, 481,000 men and 1,035,000 women were receiving the age pension. This gender imbalance is due to the

Figure 1 **Age pensioners, 1993** 



Source: Department of Social Security

Table 2

# Pension rate of age pensioners, 1993

Males	Females
no.	no.
156 745	679 919
324 451	357 567
481 196	1 034 486
	no. 156 745 324 451

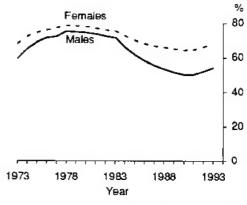
Source: Department of Social Security Annual Report

lower qualifying age and the longer life expectancy of women in comparison to men. The greater longevity of women is reflected in the type of benefit pensioners received; 67% of male age pensioners received a married rate pension compared to 35% of female age pensioners.

In 1973, the proportions of aged people who received the age pension were 59% of men and 68% of women. These proportions increased to 75% and 79% respectively in 1978. This increase was due primarily to the progressive reduction (to 70 years) in the age at which means testing no longer applied. Means testing of people under 70 years was replaced in 1976 with income testing. Between 1978 and 1990, the proportions of the aged who qualified for the age pension decreased to 50% of men and 64% of women. This decline was due to the introduction of income testing for people aged 70 years and

Figure 2

# Age pensioners as a proportion of aged people(a)



 (a) Males aged 65 years and over and females aged 60 years and over.

Source: Department of Social Security Annual Report, Estimated Resident Population over in 1983, and the introduction of assets testing in 1985. However, since 1990, the proportions have started to rise again.

### **Unemployment benefit**

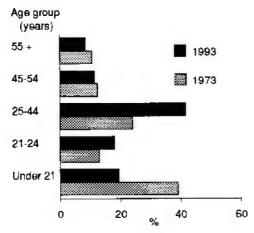
The Commonwealth unemployment benefit scheme was introduced in 1945 and replaced ad-hoc relief provided by State governments and charities. It was introduced at the start of the period of post-war reconstruction when full employment was both the ideal and the reality<sup>2</sup>. Between 1946 and 1951, the number of people receiving the unemployment benefit averaged less than 3,000.

The eligibility criteria for the unemployment benefit have changed over time. In 1988 the Job Search Allowance (JSA) replaced the unemployment benefit for 16–17 year olds. This allowance is paid at the same rate as educational allowances and therefore created a neutral system of allowances.

Currently the JSA covers 16-17 year olds and older people during their first year of unemployment. For people aged over 18 years who have been unemployed for 1 year or longer the Newstart Allowance (NSA) is payable. This incorporates agreements on appropriate job search, employment and/or training activities. In the following discussion, these two allowances are combined under the general heading of unemployment benefits.

Figure 3

People receiving unemployment benefit(a)



(a) Job Search Allowance/Newstart Allowance in 1993.

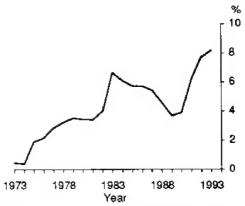
Source: Department of Social Security Annual Report and Ten Year Statistical Summary Since the early 1970s, periods of recession have considerably increased the number of people receiving the unemployment benefit. In 1973, 37,000 people (0.5% of the working age population) received the unemployment benefit. In June 1993, 914,000 (8% of the working age population) received the benefit.

Comparing the age distributions of people receiving the unemployment benefit in 1973 and 1993 shows that there has been a shift away from youth towards older age groups. The recession in the early 1970s, the first serious recession since the great depression, particularly affected employment opportunities for younger people (under 21 years), and they formed the majority of people who received the unemployment benefit in 1973. By the 1990s, further recessions had affected a wider range of age groups and, along with increasing duration of unemployment, a greater proportion of those receiving unemployment benefis were aged 21-44 years. Another factor in the reduction in the share of those under 21 years is the increased education participation of this age group both at secondary and tertiary level (see Education — national summary table p. 78).

The proportion of people in receipt of the unemployment benefit for longer than 6 months has increased over the past two decades. In 1973, 18% of unemployment benefit recipients had been receiving the

People receiving unemployment benefit as a proportion of the working age population(a)

Figure 4



(a) Males aged 16-64 years and females aged 16-59 years.

Source: Department of Social Security Annual Report
Estimated Resident Population

benefit for 6 months or longer. In 1993 the figure was 57%. For a more detailed review of duration of unemployment see *Long-term* unemployment (p. 114).

### Disability support pension

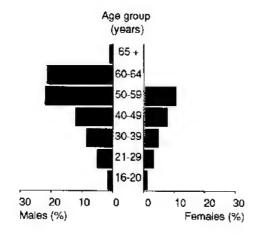
The disability support pension is the main means of income support for people who have disabilities that preclude them from supporting themselves by paid employment. This pension was previously known as the invalid pension and was introduced in 1910 as a result of the *Invalid and Old-age Pensions Act 1908*. The pension provides income support for people aged 16 years and over who are permanently incapacitated for work. It is paid at the same rate as the age pension and is currently means and assets tested<sup>3</sup>.

The qualification of permanent incapacity for work was originally taken to mean totally and permanently incapacitated for work but this was amended in the 1940s to stipulate that claimants must be permanently incapacitated for work to the extent of 85%<sup>3</sup>.

The Disability Reform Package, announced in the 1990-91 Federal Budget, emphasised active measures designed to assist people with disabilities into employment rather than place them on long-term income support. The invalid pension was renamed, becoming the disability support pension and eligibility criteria were changed. The concept of 85% permanent incapacity for work was replaced by an inability to work for at least 30 hours a

Figure 5

Disability pensioners, 1993



Source: Department of Social Security Annual Report

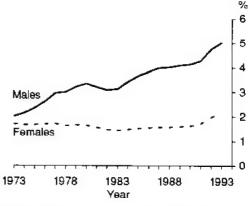
week at full award wages for at least the next two years due to physical, intellectual or psychiatric impairment, and a minimum impairment threshold of 20% was introduced.

In June 1993 there were 292,000 men (5% of working age men) and 115,000 women (2% of working age women) receiving a disability support pension. The corresponding figures for 1973 were 85,000 and 64,000 respectively. These increases represent an annual average growth rate over the period of 6% for men and 3% for women. However, during this 20 year period, the number of women receiving a disability support pension remained relatively stable until the mid-1980s while the number of men receiving the pension increased at a fairly constant rate except during the early 1980s when a change in administrative guidelines temporarily halted the increase in numbers3.

The majority of men (62%) in receipt of the disability support pension in 1993 were aged 50 years or over and thus approaching retirement age. Women in receipt of the disability support pension had a similar pattern with numbers increasing with age. However, the proportion aged 50 years and over (39%) is not comparable with that for men because disabled pensioners generally move on to the age pension at 60 years for women and 65 years for men.

Figure 6

# Disability pensioners as a proportion of the working age population(a)



(a) Males aged 16-64 years and females aged 16-59 years.

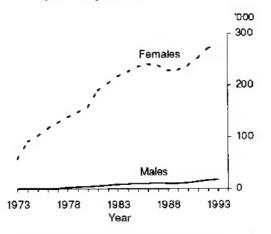
Source: Department of Social Security Annual Report; Estimated Resident Population The considerable difference between the numbers of men and women receiving a disability support pension may be partly due to the alternative benefits a woman with a disability may be entitled to claim (e.g. widow pension, wife pension and an earlier age pension). Other factors contributing to the increasing numbers of people receiving a disability support pension are the greater social acceptability of receiving government support combined with an increasingly competitive labour market<sup>3</sup>. In times of high unemployment, the eligibility criteria relating to the inability to work for the next two years are more likely to be met.

### Sole parent pension

Income support arrangements associated with the sole parent pension have changed considerably since their first introduction, reflecting changing perceptions of women's and men's roles, and changing patterns of work and marriage. Initially income support was targeted at widows (although this was broadly defined and in some circumstances included desertion and divorce) on the basis that a mother's first priority should be care of her children rather than undertaking paid work. Commonwealth pensions for widows were introduced in 1942, although war widow's pensions had been introduced in 1914. In 1973, the supporting mother's benefit was introduced, and in 1977, was replaced by the supporting parent's benefit when coverage was extended to supporting fathers. In 1989, the class A widow pension and the supporting parent benefit were amalgamated into the sole parent pension<sup>5</sup>.

Figure 7

Sole parent pensioners



Source: Department of Social Security Annual Report and Ten Year Statistical Summary

Table 3
Marital status of sole parent pensioners, 1993

	Males	Females
	no.	no.
Unmarried	806	53 709
Widowed	953	8 269
Divorced	1 127	15 236
Separated	13 534	182 836
Separated de facto	1 109	20 865
Total	17 529	280 915

Source: Department of Social Security Annual Report

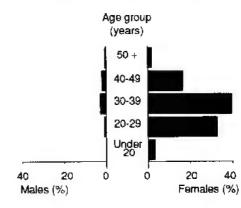
The philosophy underlying the current sole parent pension is to provide lone mothers and fathers with adequate income for themselves and their children under 16 years of age, if they wish to stay at home with them. However, schemes like JET (Jobs, Education and Training) encourage and help lone parents to obtain paid employment and thus to improve their incomes. This is assisted by the provision of child care fee relief for attendance at child care centres that receive a Commonwealth government subsidy.

In June 1993, there were 281,000 mothers and 17,500 fathers receiving the sole parent pension. The number of lone parents receiving the pension has increased at an annual average rate of 9% since 1973, with women accounting for most of the increase.

The growth in the number of lone parents receiving the sole parent pension mirrors the

Figure 8

Sole parent pensioners, 1993



Source: Department of Social Security Annual Report

growth in the total number of lone parents (see Changes in living arrangements p. 35 and Lone fathers with dependent children p. 40).

Fundamental changes in family formation and dissolution occurred in the period 1973-93. Most of these changes contributed to the increasing number of lone parents in our society. *The Family Law Act 1976* legislated for no-fault divorce thus making divorce easier and at the same time removing some of its stigma. In 1993, almost three-quarters of sole parent pensioners are separated from either a registered married or de facto partner. A further 18% had never married.

The majority of sole parent pensioners are in their 20s or 30s. In 1993, 3% were aged less than 20 years and 2% were aged over 50 years. Because of their more limited financial resources, one parent families are more likely than other families to live in rented housing, particularly public housing (see *Public tenants* p. 171).

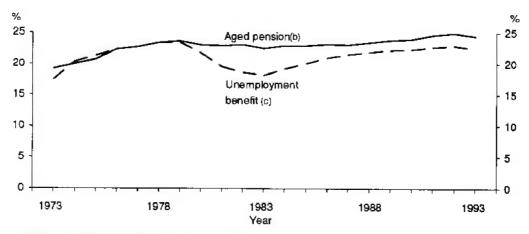
#### Relative income

Changes in the rates at which government pensions and benefits have been paid have generally been linked to changes in the cost of living as measured by the consumer price index. Depending on government policy the indexation has either been automatic or a special budget item. Other ad-hoc increases have been made from time-to-time to bring about desired increases over and above those related to the cost of living. The age and disability support pensions have always been paid at the same rate but the married unemployment benefit rate was not made equivalent to the married age pension rate until 1973. At the same time the widow pension was set to the same rate as the age pension, and the supporting mother's benefit (now the sole parent pension), also paid at the same rate, was introduced.

Throughout the 1950s and early 1960s the age pension maintained value relative to the cost of living at about 22% of average weekly male earnings (AWME). However, by 1970, wages growth had caused the value to decline to 18% of AWME. In 1973, the government announced its intention of increasing the basic pension rate by gradual increments until it reached 25% of AWME<sup>1</sup>. By 1976 the standard age pension rate had reached 23% of AWME. From 1977 to 1989, the pension value was maintained at 23-24% of AWME. In 1990 the current target figure of 25% of AWME was reached and has been maintained since.

In 1973, the government removed the age related differences in unemployment benefit rates, making the single (no dependants) rate of unemployment benefit the same as the rate of the standard age pension. However, later

Figure 9
Selected benefits and pensions as a proportion of male ordinary time average weekly earnings(a)



- (a) Based on original quarterly average weekly earnings data.
- (b) Standard rate
- (c) Single Independent rate (aged 21 years and over)

Source: Department of Social Security Annual Reports; Survey of Average Weekly Earnings

changes to unemployment benefit rates again differentiated on the basis of age. In 1978-79 the government removed the automatic indexing of unemployment benefits for single people without dependants, reverting to an annual budgetary review. From then until 1983, the value of the single independent unemployment benefit declined relative to AWME, from 24% to 18%. Although the rate increased from 1983 to 21% of AWME in 1986, the single independent unemployment rate and the standard age pension rate have maintained a gap of 2-3 percentage points of AWME in favour of the age pension.

### **Endnotes**

# For more information

- Department of Social Security Catalogue of Statistical Publications
- Detailed inquiries: ABS Outposted Officer, Department of Social Security (O6) 244 5616
- General inquiries: see p. 209

- Kewley, T. H. (1980) Australian Social Security Today: major developments from 1900 to 1978 Sydney University Press.
- 2 Cass, B. (1988) Income support for the unemployed in Australia: towards a more active system Issues Paper No. 4, Social Security Review.
- 3 Cass, B et al. (1988) Towards enabling policies: income support for people with disabilities Issues Paper No. 5, Social Security Review.
- 4 Department of Social Security Annual Report 1990-91.
- 5 Raymond, J. (1987) Bringing up children alone: policies for sole parents Issues Paper No. 3, Social Security Review.



# **Housing**

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# Housing — national summary

HOUSING STOCK	Unite	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Dwellings	'000	n.a.	n.a.	n.a.	5 900	n.a.	5 556	n.a.	6 148	n.a	6 322	n.e
Houses (of dwellings)	%	n.a.	n.a.	n.a.	77.8	n.a.	80.8	п.а.	80.7	n.a	78.2	n.a
Flats and apartments (of dwellings)	%	n,a,	n.a.	n.a.	9.7	n.a,	9.0	n.a.	11.5	п.а	п.а	n.a
Owned (of dwellings)	%	n.a.	ń.a.	n.e.	36.7	n.a.	43.0	n.a.	42.4	n.a	41.6	n.a
Being purchased (of dwellings)	%	n,a,	n.a.	n.e.	30.7	n.a.	29.4	n.a.	29.2	n.a	27.6	n.a
Public rental (of dwellings)	%	n.a.	n.a.	п.а.	5.1	n.a.	5.5	n.a.	5.8	n.a	5.6	n.a
Size of new private sector houses	m²	167	167	170	178	182	186	198	189	188	187	189
Size of new public sector houses	m²	104	98	104	108	111	114	114	110	121	122	130
Private sector dwellings completed	'000	104.8	110.7	129.1	126.5	106.2	107.7	139.4	147.5	122.9	123.0	144.8
Public sector dwellings completed	1000	10.9	13.1	13.3	13.9	13.6	10.7	11.0	12.5	11.5	9.7	11.1
HOUSING COSTS	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
			1004	1000		130,	1300	1903	1000	. 1001	1002	1993
Housing interest rate	%	12.5	11.8	11.6	13.8	15.5	14.2	15.3	16.9	15.1	11.9	9.9
Affordability index	no.	n.a	n.a	n.a	141.1	135.1	135.1	110.1	100.9	111.7	133.9	152.1
Average weekly earnings index	no.	62.2	67.1	72.2	76.7	82.2	87.2	93.5	100,0	106.6	111.5	113.5
Private rental index	no.	54.3	58.2	62.5	68.6	75.7	83.7	92.7	100.0	104.7	106.3	106.7
Public rental index	no.	52.4	56.1	61.4	67.9	74.0	85.1	94.5	100.0	105.0	110.0	112.5
Project home price index	no.	a.n	n.a	n.a	n,a	71.9	77.1	91.4	100.0	102.1	102.1	103.0
Materials used in house building price index	no.	n.a	n.a	n.a	n.a	77.9	83.8	92.9	100.0	104.6	104.9	107.0
Finance commitments for new dwellings	'000	16.6	19.7	19.1	17.0	15.3	15.7	16.1	11.9	13.0	16.0	15.7
Finance commitments for new dwellings	\$m	540	694	790	728	720	844	1 002	880	1 041	1 312	1 315
Finance commitments for alterations and additions	\$m	510	641	597	507	499	707	998	905	983	1 359	1 642
HOUSING ASSISTANCE	Units	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1983
Public sector dwelling stock	'000	245.1	259.7	273.5	288.3	315.5	327.7	337.7	351.7	362.0	n.y.a.	n.y.a.
Housing waiting list	'000	125.6	140.7	144.6	156.2	168.7	198.1	200,9	195.0	202.3	216.3	n.y.a.
Applicants accommodated	'000	35.4	37,5	41.7	46.5	49.8	47.8	49.3	53.1	51.9	n.y.a.	n.y.a.

Reference periods:

Except for the number of dwellings and the proportions which are houses; flats and apartments; owned; being purchased; and public rental, figures are for the year ending 30 June.

# **Housing** — State summary

HOUSING STOCK	Units	Years	NSW	Vic.	Old	SA	WA	Tas.	NT	ACT	Aust.
Dwellings	'0000	1992	2 135.2	1 593.7	1 095.1	560.9	608.0	168.3	54.0	106.7	6 322.0
Houses (of dwellings)	%	1992	75.0	80.1	82.1	76.4	79.0	86.1	66,3	72.0	78.2
Flats and apartments(a) (of dwellings)	%	1992	15.8	12.3	10.9	10.0	7.2	9.2	16.3	11.5	12.5
Owned (of dwellings)	%	1992	42.6	43.8	41.9	40.8	37.0	46.3	9.8	24.6	41.6
Being purchased (of dwellings)	%	1992	26.1	29.8	25.6	26.1	30.4	27.3	35.2	36.0	27.6
Public rental (of dwellings)	%	1992	5.5	3.9	3.2	11.0	6.7	8.3	16.0	12.3	5.6
Size of new private sector houses	m²	1992-93	187	178	191	184	207	171	182	171	189
Size of new public sector houses	m²	1992-93	164	132	120	90	149	102	118	157	130
Dwellings completed	,000	1992-93	42.8	27.6	45.5	10.6	19.8	4.1	1.3	4.2	155.9
HOUSING COSTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Affordability index	no.	1992-93	125.7	143.2	146.2	160.8	177.4	191.1	n.a	154.9	152.1
Finance commitments for new dwellings	'000	1992-93	4.5	3.4	2.3	2.5	1.1	0.3	0.1	1.4	15.7
Finance commitments for new dwellings	\$m	1992-93	427.1	249.0	192.4	184.7	94.8	19.4	12.7	134.4	1 314.5
Finance commitments for alterations and additions	\$m	1992-93	649.5	270.9	356.8	102.8	176.8	31.5	11.0	42.5	1 641.8
HOUSING ASSISTANCE	Units	Years	NSW	VIc.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Public sector dwelling stock	'000	1990-91	122.1	63.7	41.1	62.7	34.8	13.7	12.4	11.5	362.0
Housing waiting list	0000	1991-92	71.5	45.8	24.5	41.9	14.7	4.5	6.9	6.6	216.3
Applicants accommodated	'000	1990-91	14.4	8.8	7.8	8.1	7.7	1.7	1.9	1.5	51.9

<sup>(</sup>a) Data for flats and apartments are not consistent with previous years shown in the national summary table which exclude one storey flats/units/apartments, and flats attached to houses (granny flats).

### Housing — definitions and references

- Affordability index the ratio of average household income to the average income needed to meet the repayments for an average established dwelling purchased by a first home buyer. A value of 100 indicates that a household with average income would meet the average income requirements to service the average mortgage. An increase in the index represents an improvement in affordability. Reference: Commonwealth Bank of Australia and the Housing Industry Association Housing Report
- Alterations and additions all approved structural and non-structural changes to a dwelling of a value of not less than \$10,000 which are integral to the functional and structural design of the dwelling e.g. garages, carports, pergolas, reroofing, recladding etc. but excluding swimming pools, ongoing repairs, landscaping, and maintenance and home improvements not involving building work. Reference: Housing Finance for Owner Occupation, Australia (5609.0); Building Activity, Australia (8752.0)
- Applicants accommodated the total number of applicants accommodated in public rental accommodation in a year.

  Reference: Department of Health, Housing and

Community Services Annual Report

(6302.0)

- Average weekly earnings index the total weekly ordinary time (before tax) earnings of full-time adult employees divided by the total number of full-time adult employees and expressed as an index with base year 1989-90=100.

  Reference: Average Weekly Earnings, Australia
- **Being purchased** a dwelling that is currently being purchased for accommodation by the occupant(s) by means of a mortgagor or some other form of finance.

Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992

Dwellings — occupied self-contained places of residence including houses, townhouses, semi-detached houses, terrace homes, home units, apartments etc.

Reference: Housing Finance for Owner Occupation, Australia (5609.0): Housing Survey, Dwelling

Australia (5609.0); Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992

- Finance commitments firm offers to provide finance for owner-occupation or alterations and additions (as defined) which have been, or are normally expected to be, accepted. Commitments to provide housing finance to employees and commitments accepted and cancelled in the same month are included. Reference: Housing Finance for Owner Occupation, Australia (5609.0)
- Flats and apartments dwellings contained in structures having two or more storeys of dwelling units.

Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992 (State summary table only)

Houses — dwellings separated from other dwellings, buildings or structures by space of at least half a metre to allow access on all sides. This category also includes houses which have an attached flat (e.g. a granny flat).

- Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992
- Housing interest rate the financial year annual average of the interest rate applicable on the last working day of each month to standard variable rate loans for owner-occupation of large bank housing lenders. It is the predominant or representative rate (or range of rates) of major banks, although some banks may quote rates outside the ranges. Reference: Reserve Bank of Australia Monthly Bulletin
- Housing waiting list the number of applicants (households) waiting for public rental accommodation on 30 June.

  Reference: Department of Health, Housing and Community Services Annual Report
- Materials used in house building price index prices of selected materials used in the construction of dwellings expressed as an index with base year 1989-90=100.

  Reference: House Price Indexes: Eight Capital Cities (6416.0)
- Owned a dwelling owned outright by the occupant(s).

  Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992
- Private/public sector dwellings completed when building activity has progressed to the stage where the building can fulfil its intended function. The ABS regards buildings as completed when notified as such by the respondents (builders) to the survey. Reference: Building Activity, Australia (8752.0)
- Private rental index the price of rent of a privately owned dwelling expressed as an index with base year 1989-90=100.

  Reference: Consumer Price Index, Quarterly (6401.0)
- Project home price index the price of dwellings available for construction on a client's block of land expressed as an index with base year 1989-90=100. Reference: House Price Indexes: Eight Capital Cities (6416.0)
- Public rental dwellings rented from a State Housing Department, Trust or Commission, the ACT Housing Trust or the Northern Territory Department of Lands, Housing and Local Government.

  Reference: Housing Survey, Dwelling Characteristics of Households (4133.0); Survey of Income & Housing Costs and Amenities, 1990; Survey of Families in Australia, 1992
- Public rental index the price of rent of a government authority dwelling expressed as an index with base year 1989-90=100.

  Reference: Consumer Price Index, Quarterly (6401.0)
- Public sector dwelling stock Reference: Department of Health, Housing and Community Services Annual Report
- Size of new private/public sector houses average floor area of houses intended for private/public ownership at building completion.

  Reference: Building Activity Microfiche Service, Australia (8753.0)

### **Housing the population**

### HOUSING STOCK

Despite a decrease in the average number of occupants per dwelling, the size of dwellings has increased over the last thirty years.

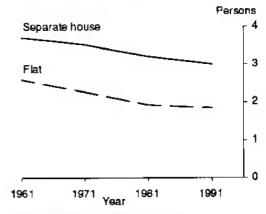
Between 1961 and 1991 the number of dwellings in Australia more than doubled, from 3.0 million to 6.5 million. Over the same period the population increased by about 60%. The average number of occupants per dwelling has thus decreased from 3.6 in 1961 to 2.8 in 1991. Decreases were recorded for all types of dwelling and mainly reflected demographic changes in the structure of the population and of families. With the total fertility rate down from 3.6 children per woman in 1961 to 1.9 in 1991 (see Family national summary table p. 32), families now have, on average, fewer children. In addition, there has been an increase in the proportion of one parent families which are on average smaller than other types of families. Finally, the ageing of the population has led to an increase in the number of older people who live alone.

### Types of dwellings

Most Australian dwellings are separate houses but their share of the total dwelling stock declined from 88% in 1961 to 78% in 1976. The share has since remained steady. The trend away from separate houses towards medium and higher density housing is related to a number of factors including the desire of government planners and private developers to meet the demand for lower priced accommodation and housing closer to employment centres. Growth in medium density housing in the 1960s and early 1970s was assisted by legislation which allowed separate title for units not on separately titled

Figure 1

Average persons per dwelling



Source: Census of Population and Housing

land. Government support for medium density housing has also strengthened in recent years with such initiatives as the establishment of the Housing Development Program in 1989 (which funded the 'Green Street' developments) and the development of the Building Better Cities program in 1991. These programs have included redevelopment directed towards better use of scarce land resources and infrastructure.

The proportion of dwellings which were unoccupied increased slightly over the 30 years 1961-91, from 7% to 9%. Unoccupied dwellings include holiday homes, temporarily vacant dwellings, recently built dwellings and dwellings for sale or lease.

Table 1

Numbers and types of private dwellings

Dwelling type	1961	1971	1976	1981	1991
	,000	'000	'000	'000	'000
Occupied private dwellings	2 781.9	3 670.6	4 140.5	4 668.9	5 852.4
Unoccupied dwellings	194.1	339.1	431.2	469.7	597.6
Total	2 976.1	4 009.6	4 571.7	5 138.6	6 450.0
	%	%	%	%	%
Separate houses	87.5	83.9	79.5	79.6	77.9
Other(a)	12.5	16.1	20.5	20.4	22.1

(a) includes row, terrace and town house, flats and apartments.

### **Dwelling size**

Some insight into the size of dwellings can be obtained by examining the number of bedrooms per dwelling. Such data are not without limitations, however. Homes may have additional rooms which are not bedrooms e.g. study, family room, rumpus room etc. and room size will also vary. Nevertheless, the number of bedrooms provides a broad measure which can be used in combination with information on the floor area of newly constructed dwellings to assess changes in dwelling size.

The majority (59% in 1991) of separate houses have three bedrooms. However, the proportion with four or more bedrooms has increased, from 15% in 1971 to 24% in 1991. Furthermore, over the last 10 years, the average size of newly constructed private houses has risen by 12% to 187 square metres in 1992 (see *Housing* — *national summary table* p. 156). Larger dwellings are on average housing fewer people than in the past.

### Nature of occupancy

Home ownership has long been encouraged by Australian governments through successive Commonwealth-State Housing Agreements, and through various schemes which assisted first home buyers to obtain access to low deposit home loans. Furthermore, owner-occupied homes are exempt from capital gains tax and excluded from assets tests in assessing eligibility for government benefits.

Over the last 30 years the combined proportions of households who owned or were buying their homes has been reasonably

stable at, or close to, 70%. However, there has been a shift in the respective proportions buying and owning. This reflects changes in the relative proportions of households in that part of the life-cyle where they are more likely to have paid off their mortgages. In addition, between 1981 and 1991 in particular, a number of other factors affected housing affordability. The deregulation of the financial markets and the associated increase in interest rates in the mid-1980s coupled with rising house prices affected the ability of households to raise loans to purchase dwellings. The increase in disposable income of dual earner families, resulting from the rise in labour force participation of married women, improved the capacity of buyers to pay off their mortgages and of renters to gain access to home ownership.

There was an increase in the proportion of households living in public housing, from 4% in 1961 to 6% in 1991, a consequence of the increased emphasis of government housing policy on public rental accommodation, particularly in the 1970s and 1980s. In 1991, 22% of the rental sector was public housing (see *Public tenants* p. 171).

### Life-cycle changes

Of the 16 million people counted in private dwellings in the 1991 Census, 40% were in dwellings owned by a household member, 34% were in dwellings being purchased by a household member and 26% were in rented dwellings. Whether a dwelling was owned, being purchased or rented is often related to the life-cycle stage of the occupants.

Children are most likely to live in houses being purchased, reflecting the tendency of young Australian families to start buying their

Table 2
Trends in nature of occupancy

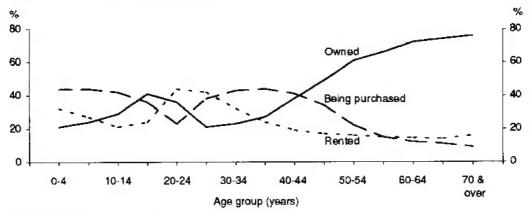
Nature of occupancy	1961	1971	1981	1991
	%	%	%	%
Owner	47.7	68.8(a)	35.1	42.9
Purchaser	22.5	(a)	35.0	28.8
Public renter	4.2	5.6	5.1	6.3
Private renter	23.3	22.3	20.6	20.7
Other(b)	2.2	3.3	4.2	1.4
Total	100.0	100.0	100.0	100.0

<sup>(</sup>a) Owners and purchasers were not separately dassifled in 1971.

<sup>(</sup>b) includes renting from a government agency other than a housing authority, and living rent free.

Figure 2

Nature of occupancy by age, 1991



Source: Census of Population and Housing

own homes. In their late teens and early 20s people tend to leave the parental home and start renting. In their 20s and 30s people are likely to start buying their first home and in their 40s and 50s to pay off their mortgages. In 1991, by age 50 years, over half the population lived in homes owned by a member of their household, usually themselves or their spouse. At age 65 years, this had increased to 75%. However, while older people had the highest rate of home ownership, after retirement, as incomes fall, so the rise in home ownership slowed and the proportion renting increased slightly. Furthermore, while the proportion of older people who rent was lower than for most other age groups, the pattern of renting differed, with the elderly having a greater tendency to rent public housing.

### Differing housing needs

The kinds of housing people live in are also related to their life-cycle stage. In 1991 over 90% of couple families with children lived in separate houses compared to 82% of couples without children. Couples without children were more likely than those with children to own their homes outright (56% compared to 38%) because they tend, on average, to be older. The family reference person was over 55 years of age in 50% of couples without children compared to 5% of couples with children.

Reflecting their generally lower income and financial resources, one parent families were twice as likely to live in rental accommodation as two parent families and considerably more likely to live in public housing. One parent families were also less likely than couple families to be owners or purchasers (55% compared to 81%).

Table 3

Dwelling type by selected family and household types, 1991

Dwelling type	One parent family	Couple only tamily	Two parent family	Group household	One person household	All househ	olds
	%	%	%	%	%	%	'000
Separate house	76.8	81.5	92.7	55.9	55.4	78.3	4 471.2
Row/terrace etc.	10.7	7.5	3.1	15.3	14.3	7.7	442.6
Flat/apartment	11.0	9.1	3.1	26.6	26.5	11.4	653.6
Other(a)	1.5	1.9	1.1	2.2	3.8	2.5	143.4
Total(b)	100.0	100.0	100.0	100.0	100.0	100.0	5 749.4

<sup>(</sup>a) Includes Improvised dwelling, caravan, camping out, house or flat attached to a shop, office etc.

<sup>(</sup>b) Includes dwelling type not stated

Table 4
Nature of occupancy by selected family and household types, 1991

Nature of occupancy	One parent family	Couple only family	Two parent family	Group household	One person household	All private dwellings
	%	%	%	%	%	%
Owner	31.8	56.2	38.3	14.1	48.9	43.0
Purchaser	22.7	23.6	42.6	15.7	13.7	29.0
Government renter	20.4	4.1	5.7	5.2	10.1	7.6
Private renter	25.1	16.1	13.3	65.1	27.2	20.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

One person households and group households were the least likely to be living in separate houses, again a reflection of their life-cyle stage and housing needs. Group households are most likely to contain two young adults (see *Changes in living arrangements* p. 35) and rented medium or high density accommodation is likely to meet their locational and financial needs better than a house in the suburbs.

One person households have a higher than average rate of home ownership due to their older age structure. 47% of people in one person households were aged 60 years or over in 1991, and 75% of these were widowed.

### Home ownership

In addition to varying with life-cycle stage, nature of occupancy also varies with the type of dwelling. In 1991, almost 90% of homes owned or being purchased were separate houses, indicative of the continuing strength of the 'great Australian dream' of owning a home on its own block of land. There has, however, been an increase in the purchase of flats and townhouses for owner-occupation.

In the private rental market about half of homes were separate houses and one-third were flats or apartments. Over half of all flats and apartments were rented privately.

# For more information

- 1991 Census Community Profiles, Australia (2722.0)
- Detailed inquiries:
   Assistant Director,
   Housing Statistics
   Unit
   (06) 252 5508
- General inquiries: see p. 209

### Nature of occupancy and dwelling type, 1991

Dwelling type Owner P		Purchaser	Government renter	Private renter	All private dwellings
	%	%	%	%	%
Separate house	87.7	91.7	55.2	49.2	77.9
Row/terrace	5.1	4.0	21.9	13.8	7.8
Flat/apartment	4.8	3.5	22.4	32.7	11.7
Other(a)	2.4	0.7	0.5	4.4	2.5
Total	100.0	100.0	100.0	100.0	100.0

(a) Includes improvised dwelling, caravan, camping out, house or flat attached to shop, office etc.

Source: Census of Population and Housing

Table 5

### Caravan park residents

### HOUSING STOCK

At the 1991 Census, 102,000 permanent residents of caravan parks and marinas were counted. These people were generally older and more likely to have been unemployed than the total population.

At the 1991 Census there were 127,000 people living permanently in 71,000 caravans. Of these, 102,000 were caravan park residents, 4% fewer than in 1986.

While representing fewer than 1% of the total population, long-term residents of caravan parks have been identified by the National Housing Strategy as having particular problems and needs. For example, caravan park residents may experience discriminatory treatment when applying for credit, library membership, hiring goods, obtaining insurance, or even when seeking medical treatment without paying in advance<sup>1</sup>. Issues such as isolation, lack of privacy, inadequate amenities, and insecurity of tenure have also been highlighted in research into long-term caravan residency.

An overview of studies into caravan park residents shows that there is great variation between parks in the quality of accommodation and amenities, and social integration. In addition, there is great variation in the experience of individuals within parks in their perceptions of privacy, space, isolation or community, and in size and quality of accommodation, nature of tenure and reasons for choosing caravan living.

Table 1

Caravan park residents, 1991

State	Tota	il dents	Resider visitor i	
	no.		no.	%
NSW	34	046	2.5	0.6
Vic.	12	271	3.7	0.3
Qld	36	567	1.5	1.2
SA	4	118	1.5	0.3
WA	9	869	0.9	0.6
Tas.		804	2.4	0.2
NT	3	541	0.6	2.1
ACT		546	2.2	0.2
Australia	101	762	1.6	0.6

Source: Census of Population and Housing

### Census counts

Prior to the 1986 Census, caravan parks were treated as non-private dwellings. Each occupant of a caravan was given a separate personal form to complete and no information was collected about their family or household characteristics.

Since 1986, each occupied caravan, tent, cabin, campervan etc. in a caravan park, and each occupied boat in a marina, has been treated as a separate private dwelling and given a household form to complete. Household, family and person based data are thus available for all persons counted in caravan parks etc.

Unoccupied caravans etc. in caravan parks, and unoccupied boats in marinas are not counted in the census.

The term caravan park residents is used in this review to refer to all persons counted in caravans, tents, cabins, campervans etc. in caravan parks, and boats in marinas, who stated that the caravan etc. occupied on census night was their usual residence.

A study by the Centre for Urban Research and Action<sup>2</sup> described three types of caravan park residents:

- savers comprising mainly young people saving to buy their own homes;
- trapped those aspiring to home ownership or who have previously owned homes but find themselves unable to afford conventional housing;
- independents those who have chosen to live in a caravan as a satisfactory and alternative means of accommodation.

This review of 1991 Census data provides a national perspective on caravan park residents and examines the extent to which they differ from the total population.

### **Geographic distribution**

At the 1991 Census, there were 36,600 permanent residents counted in Queensland caravan parks and 34,000 in New South Wales parks. Together they comprised more than two-thirds of total caravan park residents. While New South Wales had the second highest number of caravan park residents, they accounted for only 0.6 % of the total State population, equal to the national average. In Queensland, however, 1.2% of the population lived in caravans while in the

Table 2

Geographic distribution of caravan park residents, 1991

Area	WSM	VIc.	Qid	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Major urban	30.8	25.1	30.3	24.2	15.9	9.5		17.3	27.0
Other urban	35.7	28.2	42.4	26.8	47.4	49.7	40.3		38.0
Rural locality	8.7	5.0	5.5	4.5	5.3	20.3	3.4		6.5
Other rural	24.9	41.7	21.8	44.4	31.4	20.6	56.4	82.7	28.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

Northern Territory caravan park residents represented 2.1% of the total population.

The Northern Territory also had proportionally large numbers of holiday makers in caravan parks. At the 1991 Census, there were about half as many residents as visitors counted in Northern Territory caravan parks. In Western Australia, also, there were fewer residents than visitors. In contrast, New South Wales, Tasmania and the Australian Capital Territory had twice as many residents as visitors and Victoria had almost four times as many. This probably reflects the preference for warmer northern areas as holiday destinations in August. Cold winters are also likely be a factor in the relatively small numbers (in relation to State populations) of caravan park residents in the southern States.

Only 27% of caravan park residents lived in major urban centres (population 100,000 or more) compared to 63% of the total population. 38% lived in other urban centres (population 1,000-99,999) and 35% in rural areas, compared to 23% and 15% of the total population. Roughly equal proportions of caravan park residents and visitors were counted in rural areas but there were proportionally more residents in the major urban centres and fewer in other urban centres.

Caravan park residents were most urbanised in Queensland and New South Wales with 30% living in major urban centres. In the Northern Territory and the Australian Capital Territory the majority of caravan park residents lived in areas with populations of less than 200.

# Characteristics of caravan park residents

Caravan park residents had an older age profile than the total population due to the relatively low proportions of children living in caravans. In 1991, 13% of caravan park residents were aged 0-14 years compared to 22% in the total population. Among caravan park residents there are relatively low proportions of families with dependent children and relatively high proportions of people living alone. In 1991, 28% of caravan park residents lived alone compared to 7% of the total population.

Males outnumbered females among caravan park residents mainly due to the high proportions of men living alone. Among caravan park residents living alone, men outnumbered women by almost 3 to 1 overall, and by almost 6 to 1 in the 25-44 years age group. For all ages over 15 years, the male to female ratio was substantially higher among caravan park residents than in the total population.

Caravan park residents had lower levels of educational attainment, were less likely to be employed and had lower incomes than the total population. These factors are closely linked to age and life-cyle and some, but not all, of the difference can be explained by the older age profile and different household composition of caravan park residents.

In all age groups caravan park residents were less likely than the total population to have post-school qualifications, particularly a degree or higher. Almost equal proportions had skilled vocational qualifications.

Labour force participation was lower for both men and women in all age groups, except 15-24 year old men. Unemployment was higher among caravan park residents than among the total population. The discrepancy

Table 3
Selected characteristics of caravan park residents, 1991

Characteristic	Caravan park residents	Total population
	%	%
Male	56.9	49.8
Female	43.1	50.2
Age group (years)		
0-14	13.2	21.9
15-44	44.1	47.5
45-64	28.1	19.3
65 and over	14.6	11.3
Living arrangements		
With family	66.8	89.0
Alone	28.0	7.3
With others (not famil	y) 5.2	3.7
Highest qualification(a)		
Degree or higher	1.3	8.6
Skilled vocational	11.5	11.8
No post-school qualifications	68.8	59.2
Labour force status(a)		
Participation rate	54.9	62.9
Unemployment rate	32.5	11.6

(a) Persons aged 15 years and over.

Source: Census of Population and Housing

was greater for men than for women and increased with age up to the 45-54 years age group.

Almost 50% of households living in caravan parks consisted of one person only, compared to 20% of all households. In contrast, 15% of caravan park resident households contained dependent children compared to 40% of all households.

On average, caravan park resident households were smaller than all households (1.7 persons compared to 2.7), had fewer income recipients and hence had lower incomes regardless of household type. The greatest differences in these characteristics occurred in two parent family households and in young, couple only households.

Table 4
Selected characteristics of caravan park households, 1991

Characteristic	Caravan perk households	Total households
	%	%
Household type		
One parent family(a)	5.1	6.5
Couple family(a)	10.4	33.5
Couple only family	26.9	23.0
Other family	4.3	12.3
One person	48.9	20.0
Group	4.4	4.5
Household income		
\$0-\$8,000	18.5	8.7
\$8,001-\$16,000	33.7	17.0
\$16,001-\$25,000	23.7	16.9
\$25,001-\$40,000	15.7	22.3
Over \$40,000	8.9	35.1

(a) With dependent children.

Source: Census of Population and Housing

### Families with children

In general, caravan park resident parents were younger, particularly the couples, and had younger and fewer children than all parents, reflecting in part the lesser suitability of caravan parks for meeting the needs of families, particularly in terms of space and play areas. In addition, they had lower labour force participation rates and higher unemployment rates. For lone parents with dependent children the unemployment rate of caravan park residents (39%) was double the rate for all lone parents with dependent children. In two parent families with dependent children the unemployment rates among carayan park residents (32% for fathers and 30% for mothers) were over three times higher than in all two parent families with dependent children.

The median annual household income of two parent families with dependent children living in caravan parks (\$23,800) was about 60% as much as for all two parent families with dependent children. Among one parent families with dependent children the median household income of caravan park residents (\$13,600) was about 75% as much as for all one parent families with dependent children.

Table 5
Selected households living in caravan parks, 1991

Household type	Labour force participation rate(a)	Unemploy- ment rate(a)	Median annual Income	Proportion renting	Proportion purchasing	Proportion owned outright	Total households(b)
	%	%	\$	%	%	%	no.
One parent with dependent children	39.2	39.0	13 600	59.4	8.8	26.1	2 860
Couple with dependent children	65.7	31.4	23 800	38.4	17.8	37.8	5 760
Couple only, reference person aged under 35 years	88.2	29.0	28 500	44.9	17.6	32.1	3 200
Lone person, aged under 35 years	88.4	41.0	13 700	57.5	7.7	22.4	7 210
Retired couple, reference person aged 65 years or over			15 400	15.6	1.1	75.4	3 010
Retired ione person, aged 65 years or over			9 300	13.1	0.7	63.4	6 080
All households		•••	15 500	35.9	7.9	47,0	55 640

(a) Applies to the parent in a one parent family and to both partners in a couple family.

(b) Comprises only households which could be classifled by type.

Source: Census of Population and Housing

### Older people

Older people made up a relatively large proportion of caravan park residents in 1991, 15% were aged 65 years or over and 14% were aged 55-64 years compared to 11% and 8% respectively in the total population. In both age groups, labour force participation rates were lower among caravan park residents; 35% compared to 46% for 55-64 year olds and 3% compared to 6% for persons aged 65 years and over.

While the aged (65 years and over) represented a relatively large proportion of caravan park residents, the very old (80 years and over) were under-represented. 49% of aged caravan park residents lived in couple only households while 44% lived alone. In contrast to the general population, men outnumbered women in aged one person households living in caravan parks. Annual household incomes of aged people living in caravan parks were only slightly lower than in the general population.

### For more information

- 1991 Census —
   Community Profiles,
   Australia (2722.0)
- Detailed inquiries: Assistant Director, Population Census Consultancies and Profiles (06) 252 5934
- General inquiries: see p. 209

### Home ownership

In 1991, caravan park resident households were more likely than the rest of the population to have been renting their accommodation, 36% compared to 27%. Correspondingly they were less likely to be owners or purchasers regardless of household type. The difference was greatest among two parent family households, reflecting to some extent the large income

differential and the relatively young age profile of caravan park residents in this group. Also, given the size of the average caravan, the low rates of owning/purchasing among two parent families with children may be a reflection of the relative unsuitability of a caravan for housing a family.

Caravan park resident households were more likely to own their homes outright and less likely to have a mortgage. The relatively low cost of a caravan would enable many caravan park residents to buy their home outright or to pay it off quickly while the mortgage on an average house or flat may take 20-30 years to pay off.

Among retired couples and individuals aged 65 years and over, the rate of outright home ownership was very high, most having paid off their mortgages at or before retirement. In these groups the rates of outright home ownership for the total population (80% and 68% respectively) exceeded those of caravan park residents (75% and 63% respectively).

### **Endnotes**

- 1 Watson, R., Pierluigi, C., Taylor, D., Good, R. (1980) Jacked Up or Hooked On - a Survey of Long-term Caravan Park Residents in W.A. Thesis for Applied Science (Social Work) degree, W.A. Institute of Technology.
- 2 Centre for Urban Research and Action (CURA) (1978) Long-term Residents in Melbourne: a Case Study of Housing Marginality.

### **Housing affordability**

### HOUSING COSTS

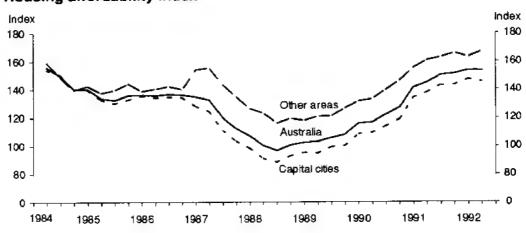
Access to affordable housing is a key issue for households and forms an important part of government housing policy. Affordability is a measure of the ongoing costs of housing in relation to income and, consequently, impacts most on people with low incomes

and at particular stages in their lives.

Affordability and accessibility of housing are determined by factors including the price of housing, the financial resources of prospective purchasers, conditions pertaining to the granting of mortgages (e.g. the housing

Figure 1

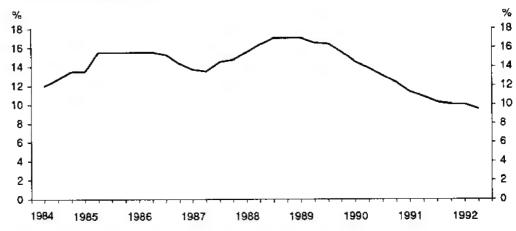
Housing affordability index



Housing
affordability has
improved since
1990 mainly due to
a substantial fall in
home loan interest
rates.

Source: Commonwealth Bank and Housing Industry Association Housing Report

Figure 2
Housing interest rate(a)



<sup>(</sup>a) The housing interest rate is the interest rate applicable on the last working day of the month to standard variable rate loans for owner occupation of large bank housing lenders. It is either the predominant rate or a representative rate (or range of rates) of major banks, although some banks may quote rates outside the range.

Source: Reserve Bank of Australia Bulletin

interest rate and the amount borrowed) and the relationship between these factors.

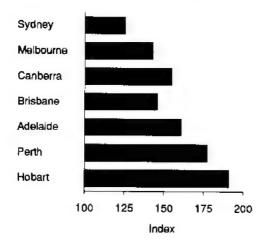
Measures of housing accessibility and affordability reflect both the household's savings capacity and repayment capacity. Accessibility to housing is mainly related to the deposit gap (the difference between the home purchase price and the amount able to be borrowed) while affordability of housing is related to a household's repayment capacity, which is based on income.

Housing affordability decreased substantially between 1988 and late 1989 when interest rates were high. Housing interest rates peaked at 17% in mid-1989, considerably reducing access to home purchase. Reductions in interest rates since 1990 have been a major contributing factor to improving housing affordability.

The national picture given by the affordability index, however, masks differences in the index across capital cities. For the financial year ending June 1993, the index showed accessibility of housing greatest in Hobart and Perth and least in Sydney. Comparing it to the moving annual median prices of established houses in June 1993, housing affordability varied between capital cities according to house prices, since interest rates remained comparable between States and Territories. Sydney had the highest house prices and the lowest affordability index. In contrast Hobart house prices were the lowest of all capital

Figure 3

Housing affordability index, 1993



Source: Commonwealth Bank and Housing Industry Association Housing Report

### Housing affordability index

The housing affordability index, derived by the Housing Industry Association and the Commonwealth Bank, measures the ability of households to meet the cost of buying their first home. The index is the ratio of average household income to the Income necessary to meet repayments on an average established dwelling purchased by a first home buyer. Income measures are based on national accounts estimates of household disposable income.

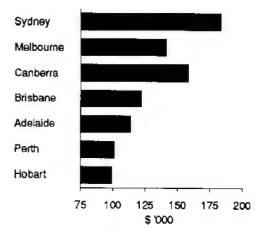
An increase in the index, represents an improvement in affordability, and a decline in the index a decrease in affordability. A value less than 100 indicates that a household with average annual income would have less than the income required to service an average mortgage.

cities and, accordingly, the housing affordability index was the highest.

### Meeting housing needs

Factors influencing whether a household is likely to be purchasing or renting are discussed in *Housing the population* (see p. 159). For a given occupancy status, the proportion of income spent on housing can be used as a broad measure of the ease (or difficulty) that people experience in meeting their housing commitments. However, to the extent that higher housing payments may reflect discretionary savings among home purchasers, care should be exercised in the use of such a measure. In the rental sector,

Figure 4
House prices(a), 1993



 (a) House prices are the moving annual median prices of established houses.

Source: Real Estate Institute of Australia Ltd *Market Facts Monthly* 

households may choose to pay a higher rent to live close to employment and so reduce travel time and cost. Nevertheless, a comparison of the proportion of income spent on housing for different types of households and levels of income provides insight into those groups most likely to be under financial pressure through housing costs.

Between 1982 and 1990, the proportion of income spent on housing increased for both private renters and home purchasers, with home purchasers experiencing the greatest increase. As expected, low income households spent proportionally more of their income on housing than high income households.

As well as the cost of housing, affordability is influenced by the level of available income. This may change as the employment status of family members changes, for example, changing from full-time to part-time work or becoming unemployed. It may also change with changes in family composition. Such changes can reduce affordability even though housing costs remain unchanged.

#### Home purchasers

At low income levels, home purchasing couples with dependants spent a higher proportion of their income on home purchase than other income unit types. Between 1982 and 1990 the proportion of their income spent on home purchase increased from 35% to 50%, a consequence of the higher interest rates in the late 1980s. The reduction in interest rates after their peak in 1990 is likely to have eased this situation in subsequent years. Couples without dependants spent a lower proportion of their income on home purchase than other income unit types.

# Low and high income unit income

The income measure used in calculating the proportion of income spent on housing is the gross income of income units. *Income units* are defined as groups of related people who live together and form a single spending unit. As such they can be considered analogous to families in that they may comprise a couple (with or without dependent children), a lone parent (with dependent children), or a lone person (including non-dependent children and other adults living in the same household).

The size and composition of income (family) units influences the standard of living achievable for a given level of income. Furthermore, family members who are working incur greater costs for transport and clothing than non-working members. The gross income measures used here have not been adjusted for this compositional effect and this should be borne in mind when comparing different types of income units.

In order to assess the relationship between housing costs and income levels across the income distribution, income units have been divided into income quintiles and the second and fourth quintiles chosen to represent low and high income levels respectively.

At high income levels, average spending on home purchase was much the same at about a quarter of income regardless of income unit type.

Another factor influencing affordability for home purchasers is the length of time for which they have been paying their home loan. Older loans are generally easier to service in that the repayments the lender requires usually remain static over the term of the loan while a person's income usually increases with age. Hence, the proportion of income spent on housing generally decreases for older people who have older mortgages.

Table 1

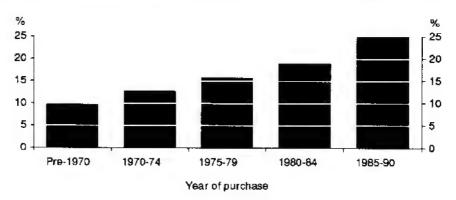
Proportion of income spent on housing by home purchasers

Lo		come		High in	High income			Total		
Income unit type	1982	1988	1990	1982	1988	1990	1982	1988	1990	
	%	%	%	%	%	%	%	%	%	
One person	26.1	32.5	33.3	19.6	22.7	26.8	21.3	23.9	28.2	
One parent	25.9	37.0	37.5	18.9	18.7	25.5	25.7	27.1	29.0	
Couple without dependants	19.9	20.8	29.8	12.8	19.0	23.5	13.2	17.2	21.4	
Couple with dependants	34.8	35.9	50.0	15.8	19.8	24.4	14.9	18.1	20.7	
Total	28.2	31.1	38.0	15.7	20.0	24.7	15.2	18.6	21.9	

Source: Income and Housing Survey, 1982; Housing Survey, 1988; Survey of Income & Housing Costs and Amenities, 1990

Figure 5

Proportion of income spent on housing by home purchasers, 1990



Source: Survey of Income & Housing Costs and Amenities

However, flexible home loan arrangements promoted by financial institutions in recent years have affected, and will continue to affect, this pattern.

### **Private renters**

Private renters spent a higher proportion of their income on housing in 1982 compared to home purchasers. However, they experienced a smaller rise than home purchasers in the proportion of income spent on housing between 1982 and 1990.

At both high and low income levels ione persons spent a lower proportion of their

income on private rent than other income unit types.

Private renters with low incomes spent just over a quarter of their income on housing in 1982, and this had increased to one-third by 1990. Those with high incomes spent 14% of their income on housing in 1982 and experienced a smaller increase, to 18%, in 1990. In contrast to purchasers, the proportion of income spent on housing by renters generally increased with age. This is a function of rents keeping pace with inflation and incomes compared to loan repayments decreasing in real terms over time.

# For more information

- Survey of Income & Housing Costs and Amenities: Housing Occupancy and Costs, Australia (4130.0)
- Detailed inquiries: Assistant Director, Household Income and Expenditure Development and Analysis (06) 252 5895
- General inquiries:
   see p. 209

Table 2

Proportion of income spent on housing by private renters

	Low It	ncome		High i	ncome		Total		
Income unit type	1982	1988	1990	1982	1988	1990	1982	1988	1990
	%	%	%	%	%	%	%	%	%
One person	21.5	22.5	29.1	13.0	15.1	16.2	18.8	19.8	21.8
One parent	34.4	39.7	37.7	15.9	23.9	23.5	33.2	36.1	32.9
Couple without dependants	33.5	36.7	37.5	13.2	16.6	18.4	14.4	17.0	17.3
Couple with dependants	31.8	35.2	39.7	16.4	19.8	20.0	17.2	21.0	20.7
Total	25.9	29.3	33.7	14.2	17.1	18.0	18.0	20.1	20.8

Source: Income and Housing Survey, 1982; Housing Survey, 1988; Survey of Income & Housing Costs and Amenities, 1990

### Public tenants

### HOUSING ASSISTANCE

in 1991, 22% of households in rental accommodation rented from a public housing authority. The proportions in Darwin, Adelaide, Hobart and Canberra were considerably higher.

In Australia, each State and Territory has its own public housing agency. These differ in administrative structure but all have a similar charter: to provide housing that is adequate and affordable, particularly to individuals and families with low income. In general, public housing authorities set the minimum and maximum level of rent for a tenant at 20% and 25%, respectively, of their income<sup>1</sup>.

The State and Territory housing agencies receive Commonwealth funding through the Commonwealth-State Housing Agreement (CSHA). This agreement, made in 1945 between the Commonwealth Government and State and Territory governments, has been periodically renegotiated in detail but in substance fulfils the original aim of providing long-term housing assistance to Australian families and individuals. In 1991-92, under the CSHA, the Commonwealth government provided \$1,058m to the States and Territories. This sum included \$793m towards building or purchasing rental housing stock which, under the agreement, was matched by the States and Territories1.

The proportion of rental dwellings and the mix of public and private tenancies have changed little over the past decade. Between 1981 and 1991 the proportion of dwellings being rented increased from 27% to 28% and

Table 1

Nature of occupancy(a)

1991	1981	Nature of occupancy
%	%	
42.9	36.7	Owned
28.8	36.5	Being purchased
28.3	26.8	Rented
6.3	5.4	Public housing authority
1.4	1.5	Other government
20.7	20.0	Private
100.0	100.0	Total
000	.000	
5 764.7	4 668.9	Total

<sup>(</sup>a) Occupied private dwellings excluding caravans etc. in caravan parks which were not identified as private dwellings in 1981.

Source: Census of Population and Housing

# Life-cycle groups and Income units

The life-cycle groups used in this review are derived from the family and household characteristics recorded in the 1991 Census of Population and Housing. These groups are based on census definitions of family and household type (see 1991 Census — Dictionary (2901.0)).

The concept of income units differs from that of families in that the focus is on grouping people into income/spending units. Income units can be considered to be analogous to family units with the distinction that non-dependent children and other adults living in the same household are treated as separate income units.

the proportion of rented dwellings which were rented from public housing authorities (PHAs) increased from 5% to 6%.

Public housing is a limited resource in great demand. In June 1992, the waiting list for rental accommodation stood at 216,000 applicants (see Housing - national summary table p. 156). The majority (73%) of families and individuals who rent, do so from private landlords and generally have less security of tenure and greater housing costs than PHA tenants. In 1990, the average proportion of income spent on rent was 17% for income units who were PHA tenants and 21% for private renters. One parent income units who rented from a private landlord spent on average 33% of their income on rent (see Housing affordability p. 167). The Department of Social Security recognises the disadvantage incurred by clients who rent in the private market by providing rental assistance which subsidises rent payments over a threshold value dependent on family type.

### State differences

Consistent with its relative size, 21% of households renting PHA accommodation in 1991 lived in Sydney. However, since public housing activity varies between States, the distribution of PHA renters is not necessarily related to population size. Adelaide has a smaller population than Melbourne, Brisbane or Perth, but a higher share of PHA renters (13%) than those cities.

The smaller capital cities tended to have higher proportions of households who rented from PHAs. About 40% of households who rented their accommodation in Darwin and Adelaide were PHA tenants, while both in Hobart and Canberra the proportion was 37%. Melbourne had the lowest proportion of public tenancies among households who rented their accommodation (15%).

#### Families who rent

One parent families and retired people, whether couples or individuals, represented 30% and 19% respectively of households who rented from a PHA in 1991. These life-cycle groups represented 12% and 6% respectively of households who rented privately. People living alone and couples without children were more likely to be renting privately if they were young, and more likely to be renting from a PHA if they were old.

Although PHAs accommodate a large proportion of low income families, such as one parent families and retired people, private or other landlords provide the majority of rental accommodation in Australia. In 1991, of all households who rented their accommodation, 22% rented from a PHA, 73% from a private landlord and 5% rented from some other government body. The latter group includes families whose employment conditions included

Table 2
Households who rent, 1991

	Tenan	ts	PHA tenants as % of all		
Location	PHA	Private	tenants(a)		
	%	%	%		
Capital cities					
Sydney	21.4	22.7	21.3		
Melbourne	11.0	17.9	15.3		
Brisbane	6.5	8.6	18.1		
Adelaide	12.6	5.3	41.1		
Perth	6.5	7.0	21.4		
Hobart	2.0	1.0	37.2		
Darwin	1.5	0.5	42.0		
Canberra	3.3	1.6	36.9		
Elsewhere	35.5	35.5	21.5		
Total	100.0	100.0	22.2		

<sup>(</sup>a) All tenants includes other government tenants as well as public and private tenants.

Source: Census of Population and Housing

provision of rental accommodation e.g. members of the defence forces and country teachers. For some specific life-cycle groups who rented, the proportion in PHA accommodation was as high as 50%. One parent families with 3 or more dependent children and lone people aged 65 years or more both fell into this category.

#### Income

Families and individuals who rent from a PHA generally have greater security of tenure than private renters. This, combined with the lower rents, makes public housing attractive to lower income recipients<sup>2</sup>. Although the income eligibility criteria for PHA rental accommodation preclude high income earners from qualifying for accommodation, once housed, the economic circumstances of tenants can improve without loss of tenancy, although rents may be increased (in general) to a maximum level of 25% of the tenant's income. However, during the financial year

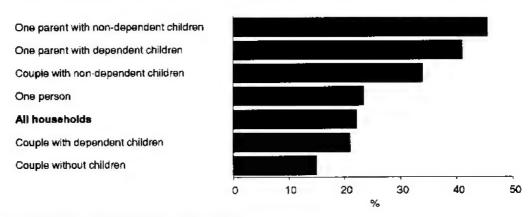
Table 3
Household composition, 1991

	Tenan	nts		
Life-cycle group	PHA	Private		
	%	%		
Couple with dependent children	24.2	24.7		
1-2 children	15.7	18.9		
3 or more children	8.4	5.8		
Couple with non-dependent children	4.0	2.2		
Couple without children(a)	11.6	18.7		
Under 35 years	1.6	11.5		
35-64 years	5.0	5.5		
65 years and over	5.0	1.6		
Lone parent with dependent children	24.0	9.9		
1-2 children	18.9	8.5		
3 or more children	5.1	1.4		
Lone parent with non-dependent children	5.8	2.0		
Lone person	27.4	25.9		
Under 35 years	2.8	11.4		
35-64 years	10.5	10.5		
65 years and over	14.0	4.0		
Other(b)	3.2	16.6		
Total	100.0	100.0		

- (a) Age is the age of the reference person.
- (b) Comprises other family households and group households.

Figure 1

Public housing authority tenants as a proportion of all tenants(a), 1991



(a) Includes PHA, other government and private tenants.

Source: Census of Population and Housing

1991-92, the great majority of PHA tenants were receiving rebates on their rent due to low income. On average, over 80% were paying less than the maximum rent to income rate<sup>1</sup>.

When PHA tenants are grouped on the basis of income quintiles, the characteristics of the income units in the quintile groups are clearly different. In 1990, income units in the 1st and 2nd quintiles of PHA tenants (accounting for the 40% who had the lowest

incomes) were almost all (95%) dependent on government pensions or benefits for their income. In comparison, 54% of income units in the 1st and 2nd quintiles of private renters were dependent on government pensions and benefits. Further, 76% of PHA renters in the bottom two quintiles were one person income units and 21% were one parent income units. Among private renters in the bottom two quintiles, 66% were one person income units and 21% were couples.

Table 4
Selected characteristics of tenants based on income distribution, 1990

	PHA tenan	ts	Private tenants		
Principal source of income and type of income unit	1st & 2nd quintile	1st & 2nd quintile         4th & 5th quintile         1st & 2nd quintile         4th & 5th quintile           %         %         %           3.1*         68.7         34.9           **         3.9         3.4           1.7*         1.4*         7.5           95.2         26.0         54.2           100.0         100.0         100.0           3.1*         73.3         21.2           1.6*         52.9         10.9           1.5*         20.4         10.3           21.4         16.5         12.6           75.5         10.3         66.2	4th & 5th quintile		
	%	%	%	%	
Principal source of income					
Wages or salary	3.1*	68.7	34.9	92.1	
Own business, trade or profession	* *	3.9	3.4	5.8	
Other private income	1.7*	1.4*	7.5	1.5	
Government pensions or benefits	95.2	26.0	54.2	0.6*	
Total	100.0	100.0	100.0	100.0	
Type of income unit					
Couple	3.1*	<i>73.3</i>	21.2	62.3	
With dependent children	1,6*	52.9	10.9	29.5	
Without dependent children	1.5*	20.4	10.3	32.8	
One parent	21.4	16.5	12.6	2.1	
One person	75.5	10.3	66.2	35.7	
Total	100.0	100.0	100.0	100.0	

Source: Survey of Income & Housing Costs and Amenities

Income units in the 4th and 5th quintiles of PHA renters (accounting for the 40% of tenants who had the highest incomes) were mainly wage and salary earners (69%) although 26% of income units in this group were dependent on government pensions or benefits for their principal source of income. Among equivalent private tenants, 92% had wages or salary as their principal source of income. 53% of income units in the top two quintiles of PHA renters were couples with dependent children. Among private tenants in the top two quintiles, about one-third were couples without dependent children, one-third were lone persons and one-third had dependent children.

#### Moving house

PHA tenants are generally considered to move less frequently than private tenants3. The 1991 Census found that 49% of PHA tenants and 79% of tenants renting from a private landlord had been living at their current address for less than 5 years. However, mobility is strongly related to age and life-cycle and the census findings reflect this. Certain groups are less likely to move than others, for example, couples and lone persons aged 65 years or over were less likely than other groups to have moved regardless of their landlord. Conversely, young couples without children and lone persons under 35 years of age were more likely to have moved in the past 5 years regardless of their landlord.

A proportion of PHA tenants who had a different address 5 years ago would have been new PHA tenants. The exact proportion cannot be determined but is likely to be greater for lone persons, lone parents and couples with dependent children since these groups represented 29%, 32% and 21% respectively of the applicants accommodated in PHA properties in 1991-921.

Table 5

Mobility rate(a) for tenants, 1991

	Tenants				
Life-cycle group	PHA	Private			
	%	%			
Couple with dependent children	58.3	81.5			
Couple with non-dependent children	en 21.0	63.9			
Couple without children(b)	38.7	81.7			
Under 35 years	80.9	91,0			
35-64 years	34.2	71.4			
65 years and over	29.6	49.6			
Lone parent with dependent children	61.9	83.6			
Lone parent with non-dependent children	26.3	65.6			
Lone person	40.8	69.0			
Under 35 years	72.0	84.4			
35-64 years	45.6	64.6			
65 years and over	31.0	36.9			
Other(c)	56.1	86.3			
Total	48.7	78.6			

- (a) Proportion of families who had a different address 5 years before.
- (b) Age is the age of the reference person.
- (c) Comprises other family households and group households.

Source: Census of Population and Housing

#### **Endnotes**

- 1 Housing Assistance Act 1989 Annual Report 1991-92 Department of Health, Housing, Local Government and Community Services.
- 2 Housing and Location Choice Survey, 1991 (Sydney and Melbourne) and Housing and Locational Preference Survey, 1991 (Adelaide and Canberra).
- 3 The National Housing Strategy (1992) Housing choice: reducing the barriers.

## For more information

- 1991 Census Community Profiles, Australia (2722.0)
- Detailed inquiries: Assistant Director, Housing Statistics Unit (06) 252 5508
- General inquires: see p. 209

# Religion

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# Trends in religious affiliation

#### SPECIAL FEATURE

Australia is a multicultural society with predominantly Christian affiliations, but there has been a downward trend over the last 80 years in the proportion of people identifying with Christianity. While this is partly a consequence of the way the data has been collected each census, increases in the last 10 years in the numbers of people with a non-Christian religion reflect recent immigration patterns. There are also differences in religious affiliation between males and females and for different age groups.

Despite the increasing diversity of religions represented in Australia, almost three-quarters of Australians stated that they were Christians in 1991.

#### Historical perspective

At the first national census in 1911, 96% of people stated their religion as Christian. In 1933 this fell to 86% as attention had been drawn to the voluntary nature of the religion question and 13% did not respond. The proportion of people stating Christian religion remained reasonably stable until the 1970s, but then declined to 74% in 1991. Most of the decline over the last 20 years was recorded in the early 1970s, in association with an explicit instruction for people with no religion to indicate as such.

#### The religion question

A voluntary question on religious affiliation has been included in every national census. In 1911 and 1921 an instruction was included indicating that people could 'object to state' their religion. From 1933, the voluntary nature of the religion question was emphasised on the form. As a result, at the 1933 Census, 13% of people did not answer compared to 2% in 1921. In 1971, the instruction if no religion, write none' was introduced with the result that 7% of people reported having no religion compared to less than 1% prior to that. In 1991, the form of the religion question changed from a write-in response to a tick-box response for the most commonly reported religious groups and a write-in space for the others. This is likely to have increased the selection of one of the seven largest religious groups included in the list.

It is important to note that while the religion with which people identify is recorded, the census does not measure the extent of their involvement or commitment.

Between 1933 and 1991, there was an increase in the proportion of the population identifying as Catholic, due primarily to immigration. Over the same period the proportion of the population identifying as Anglican fell from 39% to 24%. This was due

Table 1

Major religious affiliations

Census year	Anglican	Catholic	Other Christian	Total Christian	Non- Christian	No religion	Not stated(a)	Total
-	%	%	%	%	%	%	%	'0000'
1911	38.4	22.4	35.1	95.9	0.8	0.4	2.9(b)	4 455.0
1921	43.7	21.7	31.6	96.9	0.7	0.5	1.9(b)	5 435.7
1933	38.7	19.6	28.1	86.4	0.4	0.2	12.9	6 629.8
1947	39.0	20.9	28.1	88.0	0.5	E.0	11.1	7 579.4
1954	37.9	22.9	28.5	89.4	0.6	0.3	9.7	8 986.5
1961	34.9	24.9	28.4	88.3	0.7	0.4	10.7	10 508.2
1966	33.5	26.2	28.5	88.2	0.7	0.8	10.3	11 599.5
1971	31.0	27.0	28.2	86.2	0.8	6.7	6.3	12 755.6
1976	27.7	25.7	25.2	78.6	1.0	8.3	12.2	13 548.4
1981	26.1	26.0	24.3	76.4	1.4	10.8	11.4	14 576.3
1986	23.9	26.0	23.0	73.0	2.0	12.7	12.3	15 602.2
1991	23.8	27.3	22.8	74.0	2.6	12.9	10.5	16 850.3

<sup>(</sup>a) Includes religion inadequately described.

<sup>(</sup>b) includes object to state

in part to the declining proportion of migrants from the UK. However, it is also likely, given the Anglo-Celtic heritage of many Australians, that a larger proportion of those who formerly identified as Anglican either did not answer or specified 'no religion' once these options were explicitly stated on the census form.

#### The past decade: 1981-91

Australia's population grew by 16% in the decade to 1991. Over the same period, the number of people identifying with a religion increased by 14%. However, widely varying growth rates were observed for different groups. Between 1981 and 1991, the number of Catholics increased by 22%, overtaking Anglicans as the largest religious group in the country. The fastest growing groups in percentage terms (in the 10 years to 1991) were Buddhism, Pentecostal and Islam.

although growth was from a low base in all three cases.

Growth in the number of people identifying with a religious group can arise through overseas migration, births, and transfers from other groups (including no religion). These will be offset to some extent by deaths and transfers to other groups. It is possible to gain some insight into the relative importance of the factors underlying growth in specific religious groups over the last 10 years by examining recent migrants together with the numbers of children who are identified with each religious group.

Of the 820,000 increase in the number of Catholics between 1981 and 1991, 321,000 (39%) were migrants who had arrived in Australia since 1981. A further 221,000 were children aged 0-9 years who had one or both parents born overseas. In comparison, 86% of the growth in the number of Buddhists can

Table 2

Growth of major religious affiliations

Religion	1981	1981	1991	1991	Growth 1981-91
	,000	%	,000	%	%
Christian	11 133.3	76.4	12 466.4	74.0	12.0
Anglican	3801.5	26.1	4018.8	23.8	5.7
Baptist	190.3	1.3	279.8	1.7	47.0
Catholic	3786.5	26.0	4606.6	27.3	21.7
Churches of Christ	89.4	0.6	78.3	0.5	-12.5
Jehovah's Witness	51.8	0.4	74.8	0.4	44.4
Lutheran	199.8	1.4	250.9	1.5	25.6
Orthodox	421.3	2.9	474.8	2.8	12.7
Pentecostal	72.1	0.5	150.6	0.9	108.8
Presbyterian & Reformed	637.8	4.4	732.0	4,3	14.8
Salvation Army	71.6	0.5	72.4	0.4	1.1
Uniting Church	1203.4	8.2	1387.7	8.2	15.3
Other Christian	607.8	4.1	339.6	2.0	-43.3
Non-Christian	197.6	1.4	445.1	2.6	125.3
Buddhism	35.1	0.2	139.8	0.8	298.6
Islam	76.8	0.5	147.5	0,9	92.1
Judaism	62.1	0.4	74.3	0.4	19.5
Other non-Christian	23.6	0.2	83.6	0.5	254.4
inadequately described	73.6	0.5	49.9	0.3	-32.2
No religion	1576.7	10.8	2176.6	12.9	38.0
Not stated	1595.2	10.9	1712.3	10.2	7.3
Total	14 576.3	100.0	16 850.3	100.0	15.6

Table 3

Components of growth

				Children aged 0-9 years			
Religion	Growth	1981-91	Migration 1981-91	Both parents born in Australia	One or both parents born overseas		
	%	'000	,000	'000	'000		
Catholic	21.7	820.1	320.6	450.6	220.9		
Baptist	47.1	89.5	24.4	27.2	9.9		
Jehovah's Witness	44.4	23.0	5.2	7.1	4.9		
Lutheran	25.6	51.1	12.9	24.1	6.2		
Pentecostal	108.8	78.5	14.4	18.8	9.3		
Buddhism	298.6	104.7	90.0	0.6	10.4		
Islam	92.1	70.7	46.8	0.7	28.1		

Source: Census of Population and Housing

be attributed to immigration between 1981 and 1991 and a further 10% to the Australian born children of (these) migrants. Because the migration wave of Muslims, mainly from Lebanon and Turkey, commenced in the 1970s, a larger proportion of the growth in Islam between 1981 and 1991 arose through births to overseas born people than in the case of Buddhism (40% compared to 10%).

The combined effect of migration and births had a much smaller impact on the Baptist, Lutheran and Pentecostal denominations, accounting for 30-40% of the growth between 1981 and 1991. The increase in adherents to these groups is, therefore, likely to have involved transfers from other religious groups. It is also possible that changes in the way that the religion question was asked on the census form were responsible for some of the increase. The 1991 Census was the first in which respondents were able to tick a box if they belonged to one of the seven largest religious groups. These included Lutheran and Baptist but not Pentecostal.

#### Birthplace

Overall, 23 per cent of Australians counted at the 1991 Census had been born overseas but, because of the strong association between religion and birthplace, there was a great deal of variation between religious groups in the proportion born overseas. Over 80% of Buddhists and Hindus had been born overseas, as had 72% of Oriental Christians (made up of Armenian, Assyrian, Coptic and Syrian elements) and 64% of adherents to Islam. In contrast, less than 10% of adherents to the Salvation Army and the Uniting Church had been born overseas.

As well as the extent of correlation between religion and birthplace, the differences reflect the various migration waves, and the length of time particular groups have been in Australia. In 1981, there were 35,000 Buddhists in Australia. During the 1980s South East Asians made up a sizeable component of the migrant intake and many of these were Buddhist. As this migration wave is relatively recent, by 1991 there had not been a large increase in the number of Australian born children in this religious group. People of Orthodox affiliation, mainly from Greece and Yugoslavia, came to Australia in large numbers during the 1960s while Jewish people, mainly from Poland and the USSR, arrived in the early post-war period. As a consequence, adherents to the Jewish and Orthodox faiths include a much larger proportion (about 45%) born in Australia.

A significant proportion of Australia's recent migrant intake has been of Catholic affiliation. However, over a quarter of the whole population identifies as Catholic and, consequently, the proportion of Catholics who had been born overseas remained relatively low at 25%.

The extent to which overseas born adherents come from one or a few main countries varies considerably between religious groups. Overseas born Catholic and Jewish people have the widest range of birthplaces with the two main source countries, Italy and the United Kingdom in the case of Catholics, and Poland and the United Kingdom in the case of Jews, accounting for less than a third of the overseas born. In contrast, three-quarters of overseas born Anglicans are from the United Kingdom.

Correlations between religion and birthplace of Australia's overseas born population are particularly evident among Lutherans (mainly from Germany and the USSR), Orthodox (mainly from Greece and Yugoslavia), Muslims (mainly from Lebanon and Turkey), and Oriental Christians (mainly from Egypt and Iraq).

Table 4
Birthplace, 1991

Over-

Religion	seas born	Main source countries	Contri- bution(a)
	%		%
Anglican	16.0	United Kingdom New Zealand	12.3 1.6
Baptist	20.3	United Kingdom New Zealand	6.9 1.7
Catholic	24.9	Italy United Kingdom	5. <b>2</b> 2.9
Churches of Christ	11.5	United Kingdom Philippines	4.2 1.6
Jehovah's Witness	27.7	United Kingdom Italy	7.6 2.8
Lutheran	30.1	Germany(b) USSR	14.0 4.1
Oriental Christians	71.8	Egypt Iraq	31.4 8.5
Orthodox	54.1	Greece Yugoslavia	27.0 13.6
Pentecostal	23.1	United Kingdom New Zealand	6.5 3.5
Presbyterian & Reformed	19.6	United Kingdom New Zealand	10.3 4.2
Salvation Army	9.0	United Kingdom New Zealand	5.7 1.4
Seventh Day Adventist	26.7	New Zealand United Kingdom	4.6 2.8
Uniting Church	8.5	United Kingdom New Zealand	4.0 0.8
Buddhism	85.1	Viet Nam Malaysia	33.5 9.2
Hinduism	82.7	India Sri Lanka	26.5 12.6
Islam	64.1	Lebanon Turkey	17.3 14.5
Judaism	54.0	Poland United Kingdom	7.8 6.3

<sup>(</sup>a) Proportion of religious group born in a given country.

Source: Census of Population and Housing

# Aboriginal and Torres Strait Islander people

At the 1991 Census, there were broad similarities in the religious affiliation of Australia's Aboriginal and Torres Strait Islander population and the population as a whole. Overall, 74% of Aboriginal and Torres Strait Islander people reported a Christian affiliation, the same proportion as the total Australian population.

Anglican, Catholic and Uniting Church were stated by 26%, 23% and 6% (respectively) of the indigenous population. Corresponding figures for the whole population were 24%, 27% and 8%. Some of the smaller Christian denominations such as Baptist, Lutheran, Churches of Christ and Pentecostal had approximately double the proportions of adherents among indigenous people as they did among the rest of the population, probably as a consequence of missionary activity.

Some 13% of Aboriginal and Torres Strait Islander people reported 'no religion' and 11% did not answer the question, again similar to the rest of the population. In 1991, less than 2% of the indigenous population reported adherence to traditional religions or beliefs. It is possible, however, that some people with traditional beliefs reported 'no religion' or chose not to answer the question. In the Northern Territory, 7% of Aboriginal

Table 5
Religious affiliation of Aboriginal and Torres Strait Islander people

Religion	1986	1991
	%	%
Christian	66.7	73.8
Anglican	24.3	26.1
Baptist	2.1	3.5
Catholic	20.4	23.2
Lutheran	2.7	3.5
Pentecostal	2.7	2.5
Uniting Church	4.1	6.4
Other	10.3	8.5
Non-Christian	4.4	2.0
Inadequately described	8.0	0.5
No religion	12.1	12.6
Not stated	16.0	11.2
Total	100.0	100.0

<sup>(</sup>b) Federal Republic of Germany.

and Torres Strait Islander people reported a traditional religion.

There was an increase between 1986 and 1991 in the proportion of Aboriginal and Torres Strait Islander people who identified with a religion. In particular, the number stating a Christian denomination increased from 67% to 74%. There was an associated fall in the proportion who did not answer the question, from 16% to 11%. It is almost certain that these figures are a consequence of the introduction of a tick-box for the major Christian denominations in the 1991 Census.

#### **Demographic aspects**

The age profile of a religious group is a reflection of historic growth patterns as well as the relative importance of different components of growth in more recent years. In 1991, Islam had the youngest age profile of all religions with 53% under 25 years of age and 2% aged 65 years or more. This reflects the recent immigration of young Muslims, plus their younger age at marriage and relatively high rate of child-bearing. In

comparison, the Jewish population had one of the lowest proportions of people under 25 years (32%) and the largest proportion of people aged 65 years or more (20%), a result of the high rate of Jewish migration associated with World War II.

Of Christian denominations in 1991, the most rapidly growing, Pentecostal, had the youngest age profile with 47% of adherents under 25 years, and only 5% aged 65 years or more. The Catholic population was also relatively young with 41% aged less than 25 years, compared to 33% of Anglicans and 35% of Uniting Church adherents. Of the main Christian denominations, Presbyterians had the largest proportion of adherents aged 65 years or over (20%).

Younger people were more likely than older people to report 'no religion'. 38% of the population were under 25 years of age in 1991 but 46% of people who stated 'no religion' were in this age group. Conversely, 11% of the population were aged 65 years and over, but they comprised only 4% of people who stated 'no religion'. Additionally,

Table 6
Religious affiliation by age, 1991

	Age group (years)						
Religion	0-14	15-24	25-44	45-64	65 or more	Total	
	%	%	%	%	%	%	
Christian							
Anglican	18.1	14.4	29.8	22.1	15.6	100.0	
Baptist	22.2	15.4	31.1	18.7	12.5	100.0	
Catholic	23.8	16.8	30.6	19.1	9.7	100.0	
Lutheran	19.6	14.3	29.3	23.4	13.5	100.0	
Orthodox	18.9	19.2	29.1	25.2	7.6	100.0	
Pentecostal	30.5	16.4	33.4	14.8	4.9	100.0	
Presbyterian & Reformed	11.8	12.3	30.5	25.4	20.0	100.0	
Uniting Church	21.3	13.8	28.2	20.8	16.0	100.0	
Other	25.6	15.2	31.0	17.9	10.4	100.0	
Non-Christian							
Buddhism	21.3	19.6	41.8	12.9	4.5	100.0	
Islam	35.5	17.8	33.5	11.4	1.9	100.0	
Judaism	19.5	12.3	29.3	18.8	20.1	100.0	
Other	23.7	15.8	42.4	14.2	3.8	100.0	
No religion	27.7	18.3	37.2	12.3	4.4	100.0	
Not stated	25.5	15.2	31.6	18.1	9.7	100.0	
Total	22.3	15.8	31.3	19.2	11.3	100.0	

older people were less likely than younger people to decline to state a religious affiliation.

#### For more information

- Religion in Australia (2510.0)
- Australia in Profile (2821.0)
- Detailed inquiries: Director, National Culture/Leisure Statistics Unit (08) 237 7301
- General inquiries: see p. 209

There were also differences in religious affiliation between males and females. At the 1991 Census, 79% of females stated a religious affiliation, compared to 75% of males. Correspondingly, males were more likely than females to state 'no religion' (14% compared to 11%). Although some of this difference can be attributed to the older age profile of females (10% of males are 65 years and over compared to 13% of females), differences were also apparent for particular age groups. In 1991, 76% of women aged 15-24 years reported a religious affiliation compared to 74% of men in the same age group. In the 25-44 years age group, 77% of women reported a religious affiliation compared to 72% of men.

# Geographic distribution of religions

#### SPECIAL FEATURE

There is considerable variation in the religious composition of the States and Territories, reflecting in part the settlement patterns of Australia's overseas born population and the correlation between religion and birthplace. There is also a tendency for some religious groups to cluster in certain local areas.

#### **States and Territories**

At the 1991 Census, over 75% of people in New South Wales, Queensland and Tasmania stated a Christian affiliation. In comparison, 65% of the Northern Territory population were Christian, a reflection of the higher than average proportions who either reported 'no religion' or who did not state a religion. This is less a function of the large Aboriginal component of the Northern Territory population, which has a similar pattern of religious affiliation to the population as a whole (see Trends in religious affiliation p. 177), than it is a reflection of the younger age profile of the Northern Territory population and the greater tendency of younger people to state 'no religion'. 18% of people in the Northern Territory stated 'no religion' and 14% did not answer the question. By contrast, equivalent figures for New South Wales were 10% and 9%.

The highest proportions of people with a non-Christian religion (over 3%) were found

in New South Wales, Victoria and the Northern Territory. Both New South Wales and Victoria receive high proportions of migrants and high proportions of the four main non-Christian religions (Islam, Buddhism, Judaism and Hinduism) were found in these States. The higher proportion of non-Christians in the Northern Territory is a consequence of the presence of traditional Aboriginal religions among the indigenous population. Overall, 7% of the Northern Territory's Aboriginal and Torres Strait Islander population reported a traditional religion.

In comparison, Queensland and Tasmania had low proportions of adherents to non-Christian religions. These States receive proportionally fewer migrants than New South Wales or Victoria, and those migrants who settle in Queensland or Tasmania are more likely to be from the main English-speaking countries (New Zealand in the case of Queensland and the UK in the case of Tasmania), and hence of Christian affiliation.

As well as the variation between States and Territories in the proportion of Christians, there was also variation in the mix of Christian affiliations. While the Catholic and Anglican denominations had the highest proportions of adherents in all States and Territories, their ranking relative to one another varied. In 1991, New South Wales, Victoria, South Australia, the Northern

Table 1
Religious affiliation in the States and Territories, 1991

Religion	NSW	Vic.	Qld	SA	WA	Tas.	NŤ	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Christian	77.2	70.7	77.0	70.3	69.7	76.3	64.6	71.1	74.0
Non-Christian	3.5	3.4	1.0	1.3	2.1	0.6	3.4	2.6	2.6
Islam	1.4	1.2	0.2	0.2	0.5	0.1	0.4	0.7	0.9
Buddhism	1.0	1.0	0.4	0.6	0.9	0.2	0.8	1.1	8.0
Judaism	0.5	8.0	0.1	0.1	0.3	_	0.1	0.2	0.4
Hinduism	0.4	0.3	0.1	0.1	0.1	0.1	0.2	0.4	0.3
Other	0.2	0.2	0.2	0.3	0.3	0.2	2.0	0.3	0.2
No religion	10.0	14.4	11.6	17.4	17.1	12.2	18.0	16.3	12.9
Not stated	9.3	11.5	10.4	11.1	11.1	10.8	14.1	9.9	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

in 1991 there were more Anglicans than Catholics in Tasmania, and higher proportions of non-Christians in New South Wales, Victoria and the Northern Territory than elsewhere.

Table 2
Christian affiliation in the States and Territories, 1991

Denomination	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Catholic	38.3	41.2	33.0	29.9	36.9	25.9	35.7	43.7	37.0
Anglican	35.4	25.8	32.8	25.5	37.8	48.2	26.4	30.6	32.2
Uniting Church	8.4	11.4	13.5	20,3	8.4	11.2	13.9	8.1	11.1
Presbyterian & Reformed	6.1	6.4	7.1	2.8	4.4	4.2	4.0	5.6	5.9
Orthodox	4.1	6.6	1.0	4.1	1.8	0.6	2.8	3.0	3.8
Baptist	2.1	2.0	2.5	2.8	2.3	2.9	4.6	1.8	2.2
Lutheran	0.9	1.5	3.0	7.3	1.0	0.7	6.3	2.1	2.0
Pentecostal	8.0	1.0	2.0	2.0	1.1	1.0	1.5	1.1	1.2
Jehovah's Witness	0.5	0.4	0.9	0.7	0.9	0.6	0.4	0.3	0.6
Salvation Army	0.5	0.5	0.6	0.7	0.6	0.9	0.6	0.4	0.6
Seventh Day Adventist	0.4	0.3	0.5	0.3	0.5	0.3	0.3	0.3	0.4
Oriental Christian	0.4	0.2	_	_	_	_	_	0.1	0.2
Other	2.1	2.6	3.2	3.6	4.2	3.5	3.6	2.7	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census of Population and Housing

Territory and the Australian Capital Territory had larger numbers of Catholics than Anglicans. In Tasmania, Anglicans outnumbered Catholics by nearly two to one, reflecting that State's early British settlement and its low migrant intake from Europe and South East Asia. Queensland and Western Australia had almost equal proportions of Catholics and Anglicans.

South Australia had the highest proportion of Uniting Church adherents. This is mainly due to the relatively large proportion of Methodists in that State, relative to other States, prior to the merger of Presbyterians, Methodists and Congregationalists to form the Uniting Church in 1977. South Australia also had the highest proportion of Lutherans reflecting the German immigration to that State last century.

The relatively large settlement of Greek migrants in Victoria in the early post-war period is responsible for the higher than average proportion of Orthodox adherents in Victoria while Oriental Christians, primarily from Egypt and Iraq, are mostly to be found in New South Wales. Denominations such as Jehovah's Witness, the Salvation Army and Seventh Day Adventist are fairly evenly distributed across the States and Territories.

#### Small area concentrations

People, particularly new immigrants, tend to settle where there are others who share a similar culture. This can lead to disproportionally high concentrations of particular groups in certain areas. For example, the proportions of people who are Lutheran in the Tanunda and Robertstown SLAs (Statistical Local Areas) of South Australia were more than thirty times the national average in 1991. This reflects the patterns of German settlement in South Australia last century. Similarly, Jewish settlement in Melbourne and Sydney and Greek settlement in Adelaide and Melbourne are reflected in the proportions of Jewish adherents (more than thirty times the national average) and Orthodox adherents (more than seven times the national average) in particular suburbs.

More recent immigration patterns are reflected in the proportions of Buddhists and Muslims in some suburbs. The settlement of Vietnamese born migrants in areas such as Darra-Sumner in Queensland (26% of the SLA population) and Fairfield in New South Wales (11% of the SLA population) accounts for the high proportions of Buddhists in these areas. Similarly, the settlement of Lebanese born migrants in Auburn in New South Wales and of Turkish born migrants in Broadmeadows in Victoria accounts for the high proportions of Muslims in these areas.

Table 3

Concentrations of selected religions(a), 1991

Religion/SLA	State/ Territory	Proportion of SLA	Religion/SLA	State/ Territory	Proportion of SLA
		%			%
Catholic			Baptist		
Bathurst-Melville	NT	88.6	Victoria	NT	34.8
Daly	NT	64.6	Tennant Creek (balance)	NT	32.8
Australian total		27.3	Australian total		1.7
Anglican			Lutheran		
Green Ponds (M)	Tas.	58.7	Tanunda (DC)	SA	53.0
Torres (S)	Qld	58.5	Robertstown (DC)	SA	49.9
Australian total		23.8	Australian total		1.5
Uniting			Islam		
Aurukun	Qld	59.3	Auburn (M)	NSW	15.9
Bute (DC)	SA	56.3	Broadmeadows (C)	Vic.	9.1
Australian total		8.2	Australian total		0.9
Presbyterian & Reformed			Buddhism		
Hampden (S)	Vic.	16.9	Darra-Sumner	Qid	13.9
Walcha (S)	NSW	15.9	Fairfield (C)	NSW	11.4
Australian total		4.3	Australian total	• •	0.8
Orthodox			Judaism		
Thebarton (M)	SA	23.1	Caulfield (C)	Vic.	18.4
Whittlesea	VIc.	20.0	Waverley (M)	NSW	14.8
Australian total		2.8	Australian total		0.4

## For more information

- Religion in Australia (2510.0)
- Australia in Profile (2821.0)
- Detailed inquiries: Director, National Culture/Leisure Statistics Unit (08) 237 7301
- General inquiries: see p.209

(a) Excludes areas with a population of less than 750.

SLA - Statistical Local Area; C - City; DC - District Council; S - Shire; M - Municipality.

Source: Census of Population and Housing

The concentration of particular Christian denominations in Aboriginal and Torres Strait Islander communities in the Northern Territory and Torres Strait Island region reflects the historical impact of church missions in these areas.

### **Religion and marriage**

#### SPECIAL FEATURE

Marriage is a legal contract but in religious terms it is also, and perhaps more importantly, a sacred rite. Although the marriage rate has generally declined, and the incidence of divorce and de facto relationships (especially among younger people) have increased over the last twenty years, 92% of couples counted in the 1991 Census said they were married (see Family national summary table p. 32). Associated with changes in living arrangements has been an increase in the age at first marriage although, for some religious groups, early marriage is far more common than for others. There has also been a trend towards civil rather than religious marriage ceremonies.

Although there has been an increase in civil marriage, most wedding ceremonies are still performed by ministers of religion. Two-thirds of married couples and half of de facto couples share the same religious

#### Age at marriage

Since the mid-1970s there has been a trend towards later marriage for both men and women, accompanied by a decline in the incidence of early marriage. In the early 1990s, the median age at first marriage was 27 years for men and 25 years for women, about 3 years older than the median ages 20 years earlier. The difference between men and women in median age at first marriage has consistently been a little over 2 years (see Family — national summary table p. 32). In 1991, 11% of young people (aged 15-24 years) were or had been married and, of these, 88% were currently married. In contrast, in 1971, 27% of young people had ever been married and 97% of them were currently married.

The incidence of early marriage is more common among some religious groups than others. However, of the larger religious groups in 1991, Islam had the highest incidence of early marriage with 33% of young people ever married. Similar, or higher, figures were observed for several of the smaller groups including Aboriginal traditional religions, the Aboriginal Evangelical Mission, Druze, and the Revival Centres group of Pentecostals. Early marriage was also common among Jehovah's Witnesses, Hindus, Brethren, Christadelphians and Sikhs (about 20%). In contrast, less than 7% of young Jews had ever married. About 10% of young Anglican, Catholic, Presbyterian, Uniting Church and Buddhist adherents had ever married, a

Table 1

Ever married persons aged 15-24 years, 1991

Religion	Persons	Proportion of age group
	'000	%
Christian		
Anglican	58.0	10.1
Baptist	5.7	13.4
Catholic	76.1	9.9
Churches of Christ	1.5	13.6
Jehovah's Witness	2.7	22.9
Lutheran	4.3	12.4
Orthodox	11.0	12.2
Pentecostal	4.5	18.5
Presbyterian & Reformed	8.9	10.0
Salvation Army	1.4	14.0
Seventh Day Adventist	1.2	15.6
Uniting Church	18.6	9.8
Buddhism	2.6	9.8
Hinduism	1.2	19,9
Islam	8.5	32.5
Judaism	0.5	6.1
Other	8.5	16.6
No religion	37.6	9.5
Not stated	50.4	19.1
Total	303.4	11.5

Source: Census of Population and Housing

similar proportion to that of young people who stated 'no religion'.

#### Marriage ceremonies

Although over half of all weddings in 1992 were performed by ministers of religion, the proportion has steadily declined, from 86% in 1972 to 66% in 1978 and 58% in 1992. Most of this shift towards civil marriage occurred in the 1970s and can be attributed to the Commonwealth Government's introduction, in 1973, of authorised private civil celebrants to provide an alternative to religious ceremonies and State Registry weddings.

Over 76% of all religious weddings in 1992 were performed by ministers of the Catholic,

Figure 1

Marriages by category of celebrant % 100 100 80 80 Ministers of religion 60 60 Civil celebrant 40 40 Other civil celebrant 20 20 Official registrar 0 Ō 1992 1982 1987 1977 1972 Year

(a) Categories of civil celebrant were not separately identified prior to 1978.

Source: Marriage Registrations

Anglican or Uniting Churches. This is broadly consistent with the incidence of these denominations in the population; 77% of people who stated a religion in the 1991 Census identified with one of the three major Christian denominations.

About one-third of the 115,000 weddings in 1992 involved remarriage for one or both partners and, of these, 95% involved at least one divorced person. Ceremonies where at least one partner had been divorced were more likely to be civil than religious. 69% of first marriages (for both partners) had religious ceremonies compared to 39% of marriages where one partner was divorced and 26% of marriages where both partners were divorced.

Of the 53,000 religious weddings involving a first marriage for both partners in 1992, 41% were Catholic ceremonies, 23% were Anglican and 14% were Uniting Church. A similar pattern was observed for weddings involving a couple who were either both widowed or one widowed and one never married; 32% of religious ceremonies were Catholic, 21% were Anglican and 19% were Uniting Church. Religious weddings involving divorced people were more likely to have been conducted by a Uniting Church celebrant than by any other type (around 30%). However, where only one partner had been divorced, Anglican ceremonies were twice as frequent as Catholic ceremonies and where both partners had been divorced, Anglican ceremonies were five times as frequent as Catholic.

Table 2

Marriages performed by religious celebrants, 1992

	Category of celebrant						Proportion					
Previous marital status Anglican í	Baptist	Catholic	Churches of Christ			Presby- terian	Uniting Church	Other Christian	Non- Christian		of all marriages	
	%	%	%	%	%	%	%	%	%	%	%	%
First marriage for both partners	23.0	2.7	40.5	1.6	1.8	4.6	2.5	13.9	7.8	1.6	100.0	69.3
Both partners widowed or one widowed and one never married	20.7	4.1	31.5	3.3	1.4	1.2	3.1	18.9	13.5	2.2	100.0	53.0
One partner divorced	23.6	4.6	12.1	2.7	2.9	3.3	4.1	29.4	14.2	3.1	100.0	39.1
Both partners divorced	19.1	6.4	3.7	4.4	2.6	2.7	4.1	31.1	22.5	3.4	100.0	26.1
Total	22.9	3.1	34.8	1.9	2.0	4.3	2.8	16.9	9.5	1.9	100.0	58.2

Source: Marriage Registrations

#### De facto relationships

Over the last 20 years the decline in the marriage rate and the trend towards marrying at later ages has also been associated with an increase in the incidence of de facto relationships. Younger people are more likely to live in a de facto relationship than older people and, increasingly, marriage is preceded by a period of living together. The 1992 Survey of Families in Australia found that of people who had married after 1974, 43% of those aged 15-24 years, 37% of those aged 25-34 years and 32% of those aged 35-44 years had lived together before their marriage.

At the 1991 Census, 41% of partnered people aged 15-24 years, 13% of those aged 25-34 years and 6% of those aged 35-44 years were in de facto relationships. Again there was considerable variation according to religious affiliation. People who reported 'no religion' were the most likely to be in de facto relationships. Of the major religious groups only two, Anglicans and Presbyterians, had

Table 3

Proportion of partners in de facto relationships, 1991

	Age group (years)					
Religion	15-24	25-34	35-44			
	%	%	%			
Christian						
Anglican	47.8	14.7	6.8			
Baptist	26.8	7.5	3.8			
Catholic	37.8	11.3	5.2			
Churches of Christ	21.0	6.6	3.7			
Jehovah's Witness	6.6	2.2	1.0			
Lutheran	36.8	11.9	5.7			
Orthodox	9.0	4.0	2.1			
Pentecostal	10.7	3.0	1.7			
Presbyterian & Reformed	45.2	14.4	6.9			
Salvation Army	38.1	11.9	6.4			
Seventh Day Adventist	23.9	7.7	3.6			
Uniting Church	37.6	9.3	4.3			
Buddhism	22.1	7.5	4.3			
Hinduism	12.3	4.7	2.5			
Islam	4.9	2.9	1.8			
Judaism	35.0	9.8	4.6			
No religion	58.0	22.1	11.4			
Total	41.4	13.3	6.4			

Source: Census of Population and Housing

higher than average proportions of people in de facto relationships. Smaller groups with higher than average proportions of de factos included Spiritualists, Quakers and Christian Scientists. In contrast, less than 10% of 15-24 year old partnered people who were Orthodox, Jehovah's Witnesses or Muslims were in de facto relationships. These groups are noted for their strict teachings and cultural traditions which may well account for their high rates of marriage.

#### Shared beliefs

Married couples may share religious beliefs as a consequence of marrying someone from the same religion. Alternatively they may have had different religious backgrounds initially and subsequently converted, either one partner to the faith of the other, or both partners to a new faith for both of them. When interpreting religious characteristics of couples it should be borne in mind that all members of the same household are included on one census form which is often completed by one person. This is likely to increase the tendency for the same religion to be reported

Table 4
Proportion of partners with same religion, 1991

Religion	Married	De facto
	%	%
Christian		
Anglican	65.3	47.9
Baptist	66.7	19.3
Catholic	67.9	39.8
Churches of Christ	73.1	25.6
Jehovah's Witness	83.8	51.2
Lutheran	59.4	19.8
Orthodox	87.3	39.5
Pentecostal	88.5	45.0
Presbyterian & Reformed	45.9	19.5
Salvation Army	58.8	13.2
Seventh Day Adventist	80.3	32.2
Uniting Church	64.0	28.2
Buddhism	83.8	52.4
Hinduism	86.5	48.3
islam	93.7	58.0
Judaism	86.9	47.8
No religion	67.4	64.0
Total	68.9	49.0

for family members and to reduce the likelihood of one partner reporting a religion and of the other reporting 'no religion'. Thus, for example, while twice as many married people reported 'no religion' as reported Presbyterian, Anglicans were more likely to have a spouse with Presbyterian affiliation than with 'no religion'.

In just over two-thirds of married couples and just under half of de facto couples, both partners shared the same religious beliefs. Men were generally more likely to share their wife's religion than women were to share their husband's religion. This reflects women's greater tendency to state a religious affiliation and men's greater likelihood of reporting 'no religion' (see *Trends in religious affiliation* p. 177).

Among the major religious groups, Islam, Pentecostal and Orthodox had the highest proportions of married couples with shared beliefs. Presbyterians were least likely to be married to someone with the same belief. De facto couples had a similar pattern of religious affiliation to married couples but the proportions of couples with shared beliefs were much smaller, except for those who both stated 'no religion'. However, care should be exercised in interpreting proportions of de facto partners with the same religion for religious groups where the incidence of de facto marriage is low.

Of the two largest religious groups, Catholics and Anglicans, about two-thirds of married people had a spouse of the same denomination. Anglicans not married to another Anglican were more likely to be

Table 5

# Married people of Anglican and Catholic affiliation, 1991

Religion of spouse	Anglican	Catholic
	%	%
Anglican	65.3	16.1
Catholic	16.9	67.9
Uniting Church	5.2	3.8
Presbyterian & Reformed	4.8	3.3
Other	4.1	4.5
No religion	3.6	4.4
Total	100.0	100.0

Source: Census of Population and Housing

Table 6

#### Married people of Greek and Macedonian Orthodox affiliation, 1991

Religion of spouse	Greek Orthodox	Macedonian Orthodox
	%	%
Greek Orthodox	87.9	0.8
Macedonian Orthodox	0.1	94.9
Other Orthodox	0.2	0.5
Catholic	5.9	2.1
Anglican	2.6	0.7
Other	2.5	0.7
No religion	0.8	0.3
Total	100.0	100.0

Source: Census of Population and Housing

married to a Catholic than to someone from another religious group (17% of Anglicans were married to Catholics, 5% to Uniting Church adherents and 5% to Presbyterians). A complementary pattern was observed for Catholics; 16% of Catholics were married to Anglicans.

Presbyterians had the lowest proportion of married people with a spouse of the same denomination (46%). In addition, 24% of married Presbyterians were married to Anglicans, 18% to Catholics and 4% to Uniting Church adherents.

Within the Orthodox religious grouping, married couples with different beliefs were generally more likely to contain an Anglican, a Catholic or a person who stated 'no religion' than a person with a related affiliation. 88% of married Greek Orthodox adherents had a spouse of the same denomination. In addition, 6% of married Greek Orthodox adherents were married to Catholics and 3% to Anglicans, but only 0.3% to members of any of the other Orthodox denominations (including Macedonian, Russian and Serbian). For Macedonian Orthodox adherents, an even greater proportion of married couples shared the same beliefs (95%). Macedonian Orthodox were more likely than Greek Orthodox to be married to someone from one of the other Orthodox denominations but numbers and proportions were small. The patterns observed reflect birthplace and ethnic groupings.

# For more information

- Religion in Australia (2510.0)
- Detailed inquiries;
   Assistant Director,
   National
   Culture/Leisure
   Statistics Unit
   (08) 237 7449
- General inquiries: see p. 209

### Religion and education

#### SPECIAL FEATURE

Australia has a dual education system comprising government schools (operated by the various State and Territory Education Departments) and non-government (private) schools, the vast majority of which have a religious affiliation. However, there are considerable variations between non-government schools in terms of their type, size and affiliation.

#### Schools and students

In 1992 the Department of Employment, Education and Training identified 2,454 non-government primary, secondary and combined schools. Of these, 1,685 were Catholic schools, 120 were Anglican, 73 were Seventh Day Adventist, and 70 were Lutheran. Overall, 860,000 students were enrolled in these non-government schools with 69% at Catholic schools and 10% at Anglican schools.

Between 1982 and 1992 there was a 22% increase in non-government school enrolments. This was a consequence of both an increase in the number of non-government schools and an increase in enrolments in existing schools. Over the same period enrollments in government schools declined slightly. Consequently, non-government schools increased their share of total enrolments from 24% in 1982

#### Religious school attendance

Schools with a religious affiliation are a significant feature of the Australian education scene and religious groups have played a major role in supporting the establishment and growth of non-government schools.

Attendance at a school with a religious affiliation does not necessarily imply a particular religious commitment on the part of the students or their families. There are many factors (either real or perceived) which contribute to the choice of non-government education. These include the type of educational philosophy, discipline, facilities, status etc. For some families the religious affiliation of a school may be an important factor but for others it may be quite incidental.

to 28% in 1992. This growth was experienced in most categories of non-government school.

There are differences in the size and level of non-government schools. In 1992, the largest schools were combined primary and secondary Uniting Church schools with an average enrolment of over 1,000 students. Overall, slightly less than half of non-government school enrolments in 1992 were at secondary level. However, around 70% of Anglican, Presbyterian and Uniting Church school enrolments were secondary students.

for 28% of all school enrolments. 69% of them were in Catholic schools.

In 1992.

non-government

schools accounted

Table 1
Non-government schools(a) and students, 1992

Primary		Seconda	гу	Combined		
Religion	Schools	Enrolments	Schools	Enrolments	Schools	Enrolments
	no.	'000	no.	,000	no.	'000
Anglican	19	4.7	16	7.7	85	71.6
Baptist	13	1.1	2	0,8	24	9.4
Catholic	1 229	318.0	342	208.0	114	73.1
Judaism	7	1.5	3	0.5	9	6.3
Lutheran	56	9.4	12	6.1	2	1.6
Presbyterian	3	0.3	1	0.3	9	8.2
Seventh Day Adventist	52	3.1	7	2.0	14	1.7
Uniting Church	5	0.4	1	0.6	36	36.8
Other(b)	172	12.8	43	13.7	178	63.6
Total	1 556	351.3	427	239.7	471	272.4

<sup>(</sup>a) Excludes special schools.

Source: Department of Employment, Education and Training Census of Non-Government Schools

<sup>(</sup>b) Includes other religious schools and non-religious schools.

The majority (just over 70%) of Seventh Day Adventist and Catholic schools offered only primary education.

Despite being one of the smaller religious groups (less than 50,000 adherents in 1991) the Seventh Day Adventist Church had more schools than any other religious group except the Catholic and Anglican Churches. The schools tended to be small, on average. In 1992, the average size of Seventh Day Adventist primary schools at 60 students was about a quarter of the overall average for non-government primary schools while their secondary schools were about half the size of other non-government secondary schools. Baptist schools were also significantly smaller than the others, on average.

Generally, religious schools do not provide only for students affiliated with a particular religion. While data on the religion of students attending different categories of religious schools are not available, the 1991 Census allows the classification of non-government school students by their religious affiliation. As indicated earlier, about a quarter of all primary students and a third of all secondary students attended non-government schools. However, there were considerable variations between religions. Nearly two-thirds of Jewish students attended non-government schools, as did just over half of Catholic students and just under half of Seventh Day Adventist students. For these three groups, the proportions of primary and secondary students attending non-government schools

Table 2

Proportion of students attending non-government schools, 1991

rimary	Secondary
6	%
0.2	23.5
0.9	27.5
5.1	56.5
6.7	63.6
4.2	27.8
1.4	20.1
5.1	44.7
8.2	20.8
7.0	16.9
4.8	32.4
	5.0.2 0.9 5.1 6.7 4.2 1.4 5.1 8.2

(a) Includes other religions and denominations.

Source: Census of Population and Housing

Table 3
Non-government school enrolment comparison, 1991

	Primary	/	Secondary		
Religion	Stud- ents(a)	Enrol- ments (b)	Stud- ents(a)	Enrol- ments (b)	
	.000	000	'0000	'000	
Anglican	36.1	26.2	63.3	57.8	
Baptist	6.5	5.2	5.9	5.4	
Catholic	288.3	342.6	218.9	255.1	
Judaism	4.7	5.1	3.6	3.0	
Lutheran	6.0	9.5	4.6	7.0	
Presbyterian	3.9	2.2	7.1	6.0	
Seventh Day Adventist	2.5	4.0	1.8	2.6	
Uniting Church	12.1	10.8	21.8	27.9	
Other(c)	77.3	41.4	81.7	44.4	
Total	439.5	447.2	411.8	409.2	

- (a) Census counts of non-government students by affiliation of student.
- (b) Enrolments in non-government schools by affiliation of school.
- (c) Other religious and non-religious.

Source: Census of Population and Housing; Department of Employment, Education and Training Census of Non-Government Schools

were much the same. For other religious groups, such as Anglican, Presbyterian and Uniting Church, with lower attendance rates at non-government schools, students were about twice as likely to attend a non-government school for secondary than for primary education.

A comparison of enrolments in religious schools with students of that particular religious affiliation who are attending nongovernment schools provides some indication of the extent to which religious schools attract students outside their own religious group. Thus, for example, in the 1991 Census, 288,000 Catholic primary students indicated that they were attending non-government schools. Many, although by no means all, of these would have been attending Catholic schools. 1991 enrolment data indicate that Catholic schools provided for 343,000 students. A sizable proportion of these enrolments must therefore have included students from other religious groups (including those who did not identify with a religion in the Census). In proportional terms, Lutheran and Seventh Day Adventist schools had the highest

apparent enrolment of children from other faiths. They had enrolments ranging from 60-70% greater than the number of Lutheran and Seventh Day Adventist students who indicated in the 1991 Census that they attended non-government schools. The data do not allow any conclusions to be drawn for religious categories such as Anglican, Uniting or Presbyterian. These schools are likely to enrol students from a range of faiths and students from these denominations attending non-government schools are likely to attend a range of religious schools.

#### **Educational qualifications**

In 1991, 39% of the total population aged 15 years and over had some form of post-school qualification and 8% had a degree or higher qualification. There were differences between religious groups. Hindus (41%), Jews (35%) and Oriental Christians (22%) were

considerably more likely to have a degree or higher qualification than people from other religious groups. Conversely, 29-31% of adherents to Islam and Buddhism, and members of the Jehovah's Witness, Orthodox and Salvation Army groups had post-school qualifications. Among the larger Christian denominations, Baptists were the most likely to have a qualification (42%) and the most likely to have a degree or higher qualification (12%).

There is a correlation between the level of education and the tendency to state 'no religion'. Of people aged 15 years and over, 11% of those without a post-school qualification stated 'no religion', compared to 16% of those with vocational qualifications, 25% of those with degrees and 33% of those with higher degrees.

Table 4

Persons aged 15 years and over by level of qualification, 1991

Religion	Degree or higher	Diploma(a)	Skilled or basic vocational	No post-school qualification(b)	Total	Total
	%	%	%	%	%	'000'
Christian						
Catholic	9.8	7.1	19.8	63.3	100.0	3 511.3
Anglican	8.8	7.4	20.7	63.1	100.0	3 290.8
Uniting Church	10.7	9.2	18.6	61.5	100.0	1 092.2
Presbyterian & Reformed	8.2	7.8	22.3	61.7	100.0	646.0
Orthodox	8.6	4.1	17.1	70.2	100.0	385.3
Baptist	12.0	10.1	19.5	58.4	100.0	217.7
Lutheran	9.2	7.8	23.0	60.1	100.0	201.7
Pentecostal	9.3	10.3	19.6	60.8	100.0	104.8
Salvation Army	5.0	6.3	19.2	69.5	100.0	54.1
Jehovah's Witness	2.3	3.8	23.4	70.5	100.0	53.9
Oriental Christian	21.5	6.4	14.1	58.0	100.0	17.1
Non-Christian						
Buddhism	15.9	6.7	7.8	69.6	100.0	110.1
Islam	13.4	4.5	13.1	69.0	100.0	95.2
Judaism	35.1	8.5	11.7	44.8	100.0	59.8
Hinduism	40.6	9.4	9.5	40.6	100.0	32.3
No religion	16.7	7.3	17.9	58.0	100.0	1 573.0
Not stated	14.2	9.0	25.1	51.7	100.0	1 313.5
Total(c)	11.2	7.7	20.0	61.1	100.0	13 085.7

<sup>(</sup>a) Includes undergraduate and associate diploma.

<sup>(</sup>b) Includes those who did not state whether they had post-school qualifications.

<sup>(</sup>c) Includes other religions and denominations.

#### **Teachers**

The Census of Population and Housing does not identify whether teachers work in government or non-government schools, although it does provide data on the religious affiliation of teachers as a whole. In aggregate this was broadly similar to the overall population (22% of teachers were Anglicans and 25% were Catholics). As the level of teaching increased, however, there was an increasing tendency for teachers to state 'no religion'. 12% of primary teachers, 19% of secondary teachers and 34% of higher education teachers reported 'no religion'. This finding is related to the correlation between the level of qualification and the tendency to state 'no religion'.

Thirty years ago, many non-government schools were predominantly staffed by religious teaching personnel e.g. nuns, priests and ministers. According to the Department of Employment, Education and Training Census of Non-Government Schools for 1993, 97% of full-time teachers in private schools were lay persons.

## For more information

- Religion in Australia (2510.0)
- Detailed inquiries:
   Director, National
   Culture/Leisure
   Statistics Unit
   (08) 237 7301
- General inquirles: see p. 209

### Religious activity

#### SPECIAL FEATURE

Ministers of religion are on average older than other workers, work longer hours and receive less money. In the 1991 Census, 12,400 ministers of religion were counted. Of these, 12,300 were usually resident in Australia. Ministers of religion represented 0.2% of all employed people.

The distribution of religious affiliations of ministers of religion does not reflect the distribution of stated affiliations of the population. For example, two-thirds of people who stated a religion identified as Anglican or Catholic but only one-third of ministers of religion were Anglican or Catholic.

For each religious group the number of adherents per minister varied considerably between religious groups, being lowest for those groups of a more evangelical nature. For example, there were 58 Salvation Army members for each Salvation Army officer, and 109 Pentecostals for each Pentecostal minister. It should be noted, however, that the number of adherents per minister and comparisons between religious groups are affected by the inclusion of non-participants in the count of adherents. This could be expected to have a greater effect on some

#### Ministers of religion

Occupations were coded in the 1991 Census in accordance with the Australian Standard Classification of Occupations (ASCO). This classification defines a *minister of religion* as a person who provides motivation, guidance and training in religious life for the people of a congregation, parish or community. The category can include deacons and other types of ministers who have not been formally ordained as well as student ministers.

The group comprises only those people who were employed as ministers of religion. It does not include those who may have undertaken religious training but were working in another field nor those who may undertake religious work as a second job, either paid or voluntary. Members of religious orders whether teaching, nursing or contemplative are also excluded.

groups than others. In particular, the high numbers of adherents per minister in the Anglican and Catholic churches may reflect the tendency for people who are not active in religion to identify with these faiths.

Table 1

Ministers of religion, 1991

	Ministers					
Religion		Median age	Proportion male	Overseas born	Adherents per minister	
	no.	years	%	%	no.	
Anglican	2 215	47.5	91.6	21.1	1 804	
Catholic	2 005	53.0	91.3	22.2	2 267	
Uniting Church	1 555	51.9	85.7	20.2	890	
Pentecostal	1 379	42.6	81.2	32.0	109	
Baptist	1 229	43.4	89.4	29.0	224	
Salvation Army	1 226	43.8	47.5	14.0	58	
Presbyterian & Reformed	508	44.8	93.9	34.4	1 422	
Lutheran	340	45.4	97.6	22.3	<b>72</b> 7	
Seventh Day Adventist	286	49.0	97.6	40.5	163	
Orthodox	160	49.4	96.9	86.5	2 968	
Judaism	51	36.2	92.2	60.8	1 459	
Jehovah's Witness	40	36.7	57.5	17.9	1912	
All religions	12 334	46.4	84.8	25.6	1 041	

#### Age and sex

In 1991, the median age of ministers of religion was 46 years, considerably higher than the median age of all employed people (36 years), reflecting the fact that many people join the ministry after first working in other occupations. Catholic and Uniting Church ministers had median ages over 50 years while Jehovah's Witness and Jewish clergy (of which there were few in total) had median ages under 40 years. Both the Catholic and Uniting Churches had high proportions of their ministers aged 55 years or over (43% and 39% respectively), together with relatively low proportions under 35 years (10% and 8% respectively) suggesting they may face a future low replacement rate in their ministries.

Ministers of religion are predominantly male, reflecting the male-oriented traditions of most faiths. The Salvation Army was the only exception in 1991 with over half of its ministers being female. This, in part, reflects the fact that when Salvation Army officers are ordained, their spouses also become officers. Between 1986 and 1991 there was a slight increase in the proportion of ministers who were female, from 13% to 15%.

#### Birthplace

In 1991, 26 per cent of all ministers of religion had been born overseas. However, the proportion of overseas born ministers varied between religions and denominations. Of the religious groups examined, Salvation Army (14%) and Jehovah's Witness (18%) ministers were the least likely to have been born overseas, while Judaism (61%) and Orthodox (86%) had the highest proportions of overseas born ministers. While this is obviously related to the proportions of overseas born adherents (see *Trends in religious affiliation* p. 177), it may also be related to the absence of Australian based training courses for some religious groups.

#### Qualifications

Religious groups vary in the training requirements for their clergy and not all training will necessarily lead to a qualification. In 1991, 16% of ministers counted in the Census had no recognised post-school qualifications, 28% held a degree and 12% had post-graduate qualifications as their highest post-school qualification. There was considerable variation between the religious groups examined. Seventh Day

Table 2

Qualifications of ministers, 1991

Religion	Degree or higher	No qualifications
	%	%
Anglican	49.9	5.2
Baptist	43.3	11.1
Catholic	38.6	18.1
Jehovah's Witness		63.2
Judaism	34.6	26.9
Lutheran	59.1	9.9
Orthodox	26.3	34.4
Pentecostal	14.6	29.9
Presbyterian & Reformed	56.8	7.4
Salvation Army	8.6	31.0
Seventh Day Adventist	60.6	14.1
Uniting Church	60.6	5.4
All religions	39.3	15.9

Source: Census of Population and Housing

Adventist, Uniting Church, Lutheran and Presbyterian and Reformed ministers were most likely to have a degree or higher qualification, while Jehovah's Witness, Salvation Army and Pentecostal were the least likely. A large proportion (22%) of ministers either did not adequately describe or did not state their level of qualification. This may indicate that, to some extent, the type of training received by ministers was difficult to classify in terms of the common levels of erlucational attainment.

Many ministers had gained their highest qualification in a field other than religious studies although, in some cases, this qualification would have been gained before entering the ministry. In 1991, apart from religious studies, society and culture and education were the most common fields of study in which ministers were qualified.

#### **Hours worked**

The work of ministers of religion ranges from their specific religious and administrative duties to the broader activities associated with the pastoral care of parishioners. As such many ministers work long hours although some may not consider all their activities as work. In 1991, 55% of ministers worked more than 48 hours week, considerably higher than the 15% of all employed persons who worked those hours, and also higher than the 48% of doctors who

Table 3
Hours worked by ministers, 1991

40 hours 49 hours Religion or less or more % % Anglican 23.8 59.0 **Baptist** 328 47 2 Catholic 24 1 64.3 Jehovah's Witness 718 12.8 Judaism 24.5 57.1 Lutheran 14.7 67.2 Orthodox 45.3 41.2 Pentecostal 48.7 Presbyterian & Reformed 25.8 58.7 Salvation Army 55.2 Seventh Day Adventist 28.9 52.2 Uniting Church 24 0 56.1 All religions 28.3 55.0

Source: Census of Population and Housing

worked more than 48 hours a week.28% of ministers worked 40 hours a week or less compared to 71% of all employed persons. Part of the difference in the pattern of hours worked between ministers of religion and all employed persons is related to the different patterns of full-time and part-time work. 15% of ministers worked part-time compared to 26% of all employed persons.

Long hours of work were undertaken by ministers in most denominations. 67% of Lutheran ministers and 64% of Catholic ministers worked 49 or more hours a week, as did 59% of Anglican and Presbyterian and Reformed ministers. For most other denominations the proportion of ministers working 49 hours a week or more was closer to half. 72% of Jehovah's Witness ministers worked 40 hours or less a week, accounted for in large part by the fact that 44% of Jehovah's Witness ministers worked part-time.

#### Income

In spite of working long hours, ministers of religion generally have low incomes. In 1991, 41% of ministers had an annual income of \$16,000 or less and 6% had over \$35,000. Again, there was considerable variation between the different religious groups. Over 90% of Salvation Army and Jehovah's Witness ministers had an annual income of \$16,000 or less as did 84% of Catholic clergy, In

Table 4 Income of ministers, 1991

Religion	\$16,000 or <del>less</del>	\$35,000 or more
	%	%
Anglican	12.9	11.3
Baptist	30.5	6.5
Catholic	83.7	2.1
Jehovah's Witness	92.9	_
Judaism	18,4	49.0
Lutheran	7.5	5.5
Orthodox	32.7	3.1
Pentecostal	52.3	2.8
Presbyterian & Reformed	15.5	6.7
Salvation Army	94.3	_
Seventh Day Adventist	6.2	8.9
Uniting Church	8.4	9.8
Ali religions	41.4	6.0

Source: Census of Population and Housing

contrast, less than 10% of Seventh Day Adventist, Uniting Church and Lutheran ministers had annual incomes in this category. 49% of Jewish clergy and 11% of Anglican clergy had annual incomes of \$35,000 or more. Low incomes should be interpreted in the context of some ministers receiving income in kind such as food, car and housing.

#### Religious activities of people

The Time Use Survey conducted in 1992 provides data on the time spent on religious activities by people aged 15 years and over. While it is not possible to calculate rates of participation in religious activity from the survey, nor to determine the religious affiliation of respondents, the data can be used to examine the types of activities pursued and the characteristics of participants. Some of these religious activities involve unpaid religious work and as such are a useful complement to the information on ministers of religion. In 1992, 10% of people reporting some form of religious activity were undertaking religious administration. The time spent per day by these people averaged almost two hours.

Of the people who reported spending time on religious activities, the vast majority (85%) were involved in the practice of their religion. They were almost three times more likely to practice their religion on weekends than

during the week. On average, participants spent slightly more time on religious practice on weekends than on weekdays, 97 minutes a day compared to 84 minutes, respectively.

Although women were more likely to spend time on religious activities than men, those men who spent time on religious activities spent more time on them than women, 126 minutes a day on average for men compared to 93 minutes a day for women. However, women spent more time than men, on average, on religious administration, 128 minutes a day compared to 95.

The 1991 Census found that older people were more likely to report a religious affiliation than younger people. Correspondingly, the Time Use Survey found that they were more likely to be involved in religious activities, with people aged 60 years and over accounting for 30% of those participating in religious activities but only 15% of the total population. However, older participants devoted less time on average to their religious activity than younger participants. In 1992, participants aged 60 years and over spent an average of 91 minutes a day on religious activity compared to 94 minutes for the 45-59 years age group, 115 minutes for 25-44 year olds and 144 minutes for 15-24 year olds.

#### Religious activity

In the 1992 Time Use Survey, religious activity was defined as the sum of three components as follows:

- religious practice which includes solitary prayer, religious meditation, apostolic work, participation in bible study or prayer groups, and attendance at religious services;
- religious administration which includes participation in church councils or committees, overseeing church finances, organising parish social functions and fundraising activities, arranging vestments and flowers in church, teaching Scripture in Sunday school, and the supervision of children during religious services;
- weddings, funerals and other rites which include christenings, bar mitzvahs, first communions, confirmations and coming of age ceremonies. While such activities may also be social rites of passage, all are considered religious activities for the purposes of the survey.

# For more information

- Religion in Australia (2510.0)
- Detailed inquiries:
   Director, National
   Culture/Leisure
   Statistics Unit
   (08) 237 7301
- General inquiries: see p. 209

#### Table 5

# Proportion of participants in religious activities aged 15 years and over and average daily time spent, 1992

	Religious p	ractice	Administra	tion	Weddings, tunerals etc.		Total	
Sex	Proportion	Time	Proportion	Time	Proportion	Time	Proportion(a)	Time
	%	mins	%	mins	%	mins	%	mins
Male	85.0	106	11.5	95	12.2	197	100.0	126
Female	84.9	75	8.8	128	10.6	168	100.0	93
Total	84.9	88	9.9	113	11.2	181	100.0	106

<sup>(</sup>a) Percentages do not add to 100 because people may have been involved in more than one activity.

Source: Time Use Survey



# International



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#### Caution

Statistics for countries other than Australia (unless otherwise stated) presented in this chapter have been reproduced from international statistical compendia. National statistical systems differ from country to country and therefore caution should be exercised when comparing international data. Details of national differences can be found in the country notes in the source publications.



Table 1
Population composition

Country	Reference year	Total population	Aged 0-14 years	Aged 15-64 years	Aged 65 years and over	Dependency ratio
		'000	%	%	%	ПO.
Australia	1992	17 596	21.7	66.9	11.4	0.49
Canada	1992	27 367	20.8	67.4	11.8	0.48
China	1992	1 187 997	27.2	66.9	5.9	0,49
France	1992	57 182	20.0	65.6	14.4	0.52
Greece	1992	10 182	18.5	67.1	14.4	0.49
Hong Kong	1992	5 800	20.0	70.6	9.3	0.42
Indonesia	1992	191 170	34.7	61.2	4.1	0.63
Italy	1992	57 782	16.4	68.9	14.7	0.45
Japan	1992	124 491	17.6	69.8	12.5	0.43
Korea (Republic of)	1992	44 163	24.5	70.5	5.0	0.42
Malaysia	1992	18 792	38.2	58.0	3.8	0.72
New Zealand	1992	3 455	23.0	66.0	11.0	0.52
Papua New Guinea	1992	4 056	40.2	57.3	2.5	0.75
Singapore	1992	2 769	22.8	71.4	6.0	0.40
Sweden	1992	8 652	18.2	64.1	17.6	0.56
United Kingdom	1992	57 696	19.3	65.0	15.7	0.54
United States of America	1992	255 159	21.7	65.7	12.6	0.52
Viet Nam	1992	69 485	37.9	57.3	4.8	0.75

Source: World Health Organisation (1993) World Health Statistics Annual 1992

Table 2

Population growth

Country	Reference year	Annual average growth rate	Reference year	Annual rate of natural increase	Crude birth rate(a)	Crude death rate(a)	Reference year	Total fertility rate
		%		%	no.	no.		no.
Australia	1985-91	1.6	1990	8.0	15.4	7.0	1990	1.9
Canada	1985-91	1.2	1991	0.8	15.3	7.3	1990	1.7
China	1985 <del>-9</del> 1	1.4	1985 <del>-9</del> 0	1.5	21.2	6.7	1990	2.4
France	1985-91	0.6	1991	0.4	13.3	9.2	1990	1.8
Greece	1985-91	0.2	1989	0.1	10.1	9.2	1990	1.5
Hong Kong	1985 <del>-9</del> 1	1.3	1990	0.7	11.7	4.9	1990	1.4
Indonesia	1985-91	2.2	1985-90	1.9	28.6	9.4	1990	3.5
Italy	1985 <del>-9</del> 1	n.a.	1990	0.1	9.8	9.3	1990	1.3
Japan	1985-91	0.4	1991	0.3	9.9	6.7	1990	1.7
Korea (Republic of)	198591	1.0	1989	0.9	14.5	5.4	1990	1.7
Malaysia	1985-91	2.6	1990	2.3	28.0	4.7	1990	4.0
New Zealand	1985-91	0.7	1991	1.0	17.8	7.8	1990	2.0
Papua New Guinea	1985 <del>-9</del> 1	2.0	1985-90	2.3	34.2	11.6	1990	5.3
Singapore	1985 <del>-9</del> 1	1.3	1991	1.3	17.8	5.0	1990	1.7
Sweden	1985-01	0.6	1991	0.3	14.3	11.0	1990	1.9
United Kingdom	1985-91	0.2	1991	0.3	13.8	11.3	1990	1.8
United States of America	1985 <del>-0</del> 1	1.0	1991	0.8	16.3	8.6	1990	1.9
Viet Nam	1985-91	2.2	1985- <del>9</del> 0	2.2	31.8	9.5	1990	4.2

(a) Per 1,000 population.

Source: United Nations (1992) 1991 Demographic Yearbook



Table 3
Population projections

	Populat	ion		Media	n age		Aged	0-14 yea	M'8	Aged	65 years	and over
Country	2000	2010	2025	2000	2010	2025	2000	2010	2025	2000	2010	2025
	million	million	million	years	years	years	%	%	%	%	%	%
Australia(a)	18.9	20.6	23.0	34.8	37.4	40.0	30.3	28.3	27.9	17.2	18.8	27.1
Canada	28.5	30.1	31.9	37.4	40.3	42.8	27.3	25.2	26.2	18.5	21.1	34.0
China	1 299.2	1 395.3	1 512.6	29.8	34.2	37.9	39.9	30.1	26.9	10.5	11.4	18.7
France	58.1	59.4	60.4	37.3	39.8	42.2	29.7	27.5	27.5	23.7	23.8	33.5
Greece	10.2	10.2	10.1	38.4	40.9	43.9	26.0	26.4	25.6	25.7	28.5	33.2
Hang Kong	6.3	6.5	6.5	36.8	41.4	47.4	24.6	21.7	20.4	15.7	17.0	36,5
Indonesia	218.7	246.7	285.9	24.7	28.4	33.3	49.1	38.6	33.0	8.0	9.5	13.4
Italy	57.2	56.2	53.0	39.3	42.9	48.0	22.9	22.9	20.7	24.9	28.3	35.6
Japan	128.5	131.0	127.5	39.7	41.8	45.6	25.2	27.4	24.5	23.6	31.1	39.1
Korea (Republic of)	46.4	49.5	51.6	31.6	36.2	41.5	29.4	27.0	24.3	8.9	12.1	21.1
Malaysia	22.0	25.2	30.1	22.9	26.7	32.6	55.9	38.7	34,9	6.8	7.8	12.8
New Zealand	3.7	3.9	4.1	33.9	97.1	40.0	33.0	28.9	27.8	16.7	18.2	26.7
Papua New Guinea	4.8	5.8	7.3	20.2	22.2	26.6	67.0	56.6	41.7	4.4	4.4	5.7
Singapore	3.0	3.2	3.3	34.6	38.5	41.6	31.5	25.1	26.4	10.3	13.2	29.9
Sweden	8.6	8.6	8.6	39.9	41.8	43.2	29.0	26.2	26.5	26.7	29.2	36.6
United Kingdom	58.4	59.0	59.7	37.4	40.3	41.8	30.0	27.0	27.3	23.2	23.7	30.7
United States of America	266.1	280.9	299.9	36.5	38.9	40.9	30.1	27.4	28.7	19.1	20.0	31.7
Viet Nam	82.4	97.4	117.5	22.0	25.0	30.4	59.3	46.9	34.8	7.5	6.5	9.3

(a) United Nations projections for Australia may not agree with ABS projections due to differences in assumptions and methodology.

Source: United Nations (1991) World Population Prospects 1990

Table 4

Health status

	D-4	1-4	Reference	Life expectancy at birth		
Country	Reference year	Infant mortality rate(a)	year	Males	Females	
		no.		years	years	
Australia	1992	7.0	1990	73.0	79.4	
Canada	1991	6.8	1990	73.4	80.2	
China	1985 <del>-9</del> 0	32.0	1990	68.0	70.9	
France	1991	7.2	1990	72.0	80.3	
Greece	1990	9.7	1990	74.2	79.4	
Hong Kong	1990	6.1	1990	74.3	79.8	
Indonesia	1985-90	75.0	1990	58.5	62.0	
italy	1990	8.5	1990	73.1	79.6	
Japan	1991	4.4	1990	75.4	81.2	
Korea (Republic of)	1985-90	25.0	1990	66.2	72.5	
Malaysia	1990	13.3	1990	67.5	71.6	
New Zealand	1991	8.3	1990	71.7	77.9	
Papua New Guinea	1 <del>985-9</del> 0	59.0	1990	53.2	54.7	
Singapore	1991	5.5	1990	70.8	76.4	
Sweden	1991	3.8	1990	74.3	80.3	
United Kingdom	1991	7.4	1990	72.3	77.9	
United States of America	1991	8.9	1990	71.6	78.5	
Viet Nam	1985-90	64.0	1990	60.6	64.8	

(a) Per 1,000 live births.

Source: United Nations (1992) 1991 Demographic Yearbook; United Nations (1993) Statistical Yearbook 1990/91



Table 5
Standardised death rates(a) for selected causes of death

Country	Reference year	Malignant neoplasms (cancer)	ischaemic heart disease	Cerebro- vascular disease (stroke)	Motor vehicle traffic accidents	Suicide and self-inflicted injury(b)	All causes
		no.	no.	no.	no.	no,	по.
Australia	1988	112.9	110.2	41.0	17.8	11.5	457.2
Canada	1990	118.3	87.9	26.4	13.1	10.9	424.3
China		n.a.	n.a.	n.a.	п.а.	n.a.	n.a.
France	1990	118.1	34.2	29.4	16.5	14.4	414.7
Greece	1990	93.6	53.6	69.9	19.7	2.6	432.5
Hong Kong		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia		n.a.	n.a.	n.a.	n.a,	n.a.	n.a.
Italy	1989	120.7	53.1	50.1	12.8	5.1	437.2
Japan	1991	94.6	19.6	45.1	9.8	11.0	349.0
Korea (Republic of)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Malaysia		n.a.	n.a.	п.а.	n.a.	n.a.	n.a.
New Zealand	1989	128.1	122.7	43,5	22.2	12.6	513.1
Papua New Guinea		n.a.	n.a.	n.a.	n,a.	n.a.	n.a.
Singapore	1990	118.2	99.3	63.4	8.5	11.8	521.0
Sweden	1989	96.5	101.2	35.3	9.1	14.2	411.4
United Kingdom	1991	128.1	118.6	47.5	8.3	6.4	476.5
United States of America	1989	115.2	98.0	27.2	17.9	10.2	490.0
Viet Nam		n.a.	п.а.	ń.a.	n.a.	n.a.	n.a.

<sup>(</sup>a) Standardised death rates are the overall death rates per 100,000 population that would have prevailed in a standard population if it had experienced at each age the death rates of the population being studied. The standard population used in this table is the World Health Organisation new world standard population. Standardised death rates for Australia presented in the Health chapter of this publication or elsewhere in ABS publications are not comparable due the use of a different standard population and different reference periods.

Source: World Health Organisation (1993) World Health Statistics Annual 1992

<sup>(</sup>b) It is generally acknowledged that suicides are under-reported as a cause of death. The degree of under-reporting varies from country to country, partly for social and cultural reasons, but also because of differences in legal requirements and administrative procedures in arriving at a verdict of suicide.



Table 6
Health services and expenditure

Country	Reference year	Health expenditure as % of GDP	Health expenditure per capita at PPP(z)	Reference year	Doctors per 1,000 population	Reference year	Acute hospital beds per 1,000 population
		%	\$US		no.		no.
Australia	1991	8.2	1 310	1991	2.3	1992	4.5
Canada	1991	10.0	1 915	1991	2.2	1989	5.0
China		n.a.	n.a.		п.а.		n.a.
France	1991	9.1	1 650	1991	2.7	1990	5.2
Greece	1991	5.2	404	1990	3.4		п.а.
Hong Kong		n.a.	n.a.		n.a.	• •	n.a.
Indonesia		n.a.	n.a.		n.a.		n.a.
Italy	1991	8.3	1 408	1989	1.3		n.a.
Japan	1991	6.6	1 267	1990	1.6		n.a.
Korea (Republic of)		n.a.	n.a.		n.a.		n.a.
Malaysia		n.a.	n,a.		n.a.		n.a.
New Zealand	1991	7.6	1 050	1989	1.9		n.a.
Papua New Guinea		n,a.	n.a.		n.a.		п.а.
Singapore		n.a.	n.a.		n.a.		n.a.
Sweden	1991	8.6	1 443	1991	2.9	1990	3.9
United Kingdom	1991	6.6	1 043	1990	1.4	1986	2.8
United States of America	1991	13.4	2 867	1990	2.3	1991	3.5
Viet Nam		n.a.	n.a.		n.a.		n.a.

<sup>(</sup>a) PPP (purchasing power parities) are the rates of currency conversion which eliminate the differences in price levels between countries.

Source: Organisation for Economic Co-operation and Development (1993) OECD Health Systems: facts and trends 1960-1991



Table 7 **Labour force** 

	Reference	Economically active	Perticipation rate of persons aged 15 years and over			
Country	year	population(a)	Total	Males	Females(b)	
		'000'	%	%	%	
Australia	1992	8 627	63.0	74.4	51.9	
Canada	1992	13 797	65.5	73.8	57.6	
China		n.a.	n.a.	n.a.	n.a.	
France	1991	25 330	54.8	63.6	46.6	
Greece	1988	3 953	49.2	64.0	35.3	
Hong Kong	1992	2 793	62.3	78.0	46.2	
Indonesia	1989	72 781	66.1	81.0	51.7	
łtaly	1991	24 245	42.5	54.9	30.7	
Japan	1992	65 780	64.0	78.0	50.7	
Korea (Republic of)	1992	19 383	60.9	75.3	47.3	
Malaysia	1990	6 685	59.6	77.1	42.2	
New Zealand	1992	1 635	63.3	73.1	54.0	
Papua New Guinea		n.a.	n.a.	n.a.	n.a.	
Singapore	1992	1 620	65.3	79.9	51.3	
Sweden	1992	4 464	82.0	84.0	80.0	
United Kingdom	1991	28 768	61.7	72.5	51.7	
United States of America	1992	126 982	63.8	72.2	56.0	
Viet Nam		n.a.	n.a.	n.a.	n.a.	

<sup>(</sup>a) For most countries the economically active populations are aged 15 years and over. However, the age range varies for some countries: Greece and Italy — 14 years and over; UK and USA — 16 years and over; Malaysia — 15-64 years; Sweden — 16-64 years. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

Source: International Labour Office (1992 & 1993) Year Book of Labour Statistics

<sup>(</sup>b) Activity rates for females are frequently not comparable internationally since, in many countries, relatively large numbers of women assist on farms or in other lamily enterprises without pay. There are differences between countries in the criteria for determining the extent to which such workers are counted as economically active.

Table 8
Employment and unemployment(a)

	Reference		Reference		Unemployment
Country	year	Employment	year	Unemployment	rate
		,000		'000	%
Australia	1992	7 594	1992	933	10.8
Canada	1992	12 240	1992	1 556	11.3
China	1992	594 320	1992	3 603	2.3(b)
France	1992	22 332	1992	2 552	10.2
Greece	1991	3 632	1991	301	7.7
Hong Kong	1992	2 738	1992	55	2.0
Indonesia	1992	78 104	1991	1 042	n.a.
Italy	1991	21 595	1992	2 799	11.5
Japan	1992	64 360	1992	1 420	2.2
Korea (Republic of)	1992	18 921	1992	464	2.4
Malaysia	1990	6 685	1987	79	n,a.
New Zealand	1992	1 467	1992	169	10.3
Papua New Guinea		n.a.		n,a.	n.a.
Singapore	1992	1 576	1992	43	2.7
Sweden	1992	4 250	1992	214	4.8
United Kingdom	1992	25 463	1992	2 732	9.6
United States of America	1992	117 598	1992	9 384	7.3
Viet Nam		n.a.		n.a.	n.a.

<sup>(</sup>a) For most countries the employed and unemployed populations are aged 15 years and over. However, the age range varies for some countries: China — all ages; Indonesia — 10 years and over; Greece and Italy — 14 years and over; UK and USA — 16 years and over; Sweden — 16–64 years; Malaysia (employed only) — 15–64 years; France (unemployed only) — 16 years and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.

Source: International Labour Office (1992 & 1993) Year Book of Labour Statistics

<sup>(</sup>b) Urban areas only.



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